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TEACHERS' SALARIES AND SALARY SCHEDULES

Edward S. Evenden
N.E.A., 1919

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TEACHERS' SALARIES

AND

SALARY SCHEDULES

IN THE UNITED STATES 1918-19

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By

EDWARD SAMUEL EVENDEN

Submitted in Partial Fulfilment of the Requirements for the Degree of Doctor of Philosophy, in the Faculty of Philosophy, Columbia University

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FOREWORD

The Commission on the Emergency in Education of the National Education Association has, from the beginning of its work, recognized the necessity of informing the public with respect to teacher's salaries.

In order to supplement the work which had already been done by the Committee on Teachers' Salaries, Tenure, and Pensions, the Commission sent out during February of 1919 a questionnaire to superintendents of schools thruout the country. The data thus collected were turned over to Dr. E. S. Evenden of Teachers College, Columbia University, who, under the direction of the Chairman of the Commission and of Professor N. L. Engelhardt, prepared the report which is submitted herewith.

The National Education Association and the teachers of the country are indebted to superintendents who cooperated with the Commission in furnishing the data, to a group of graduate students in Teachers College, Columbia University, who contributed valuable assistance in the tabulation of replies, without cost to the association, but most of all to Dr. Evenden, who gave a large part of his time over a period of eight months in the preparation of this report. Superintendents of schools, teachers, and school board members will find in the study a most careful analysis of the salary problem, together with proposals for salary schedules. It is only as the recommendations made are carried out by local boards of education that we may hope to provide well trained teachers for all American boys and girls.

GEORGE D. STRAYER,
Chairman, Commission on the Emergency in Education.

INTRODUCTION

Some Facts Showing That There is a "National Emergency in Education"

1. The average number of years (of 200 days) attendance at public schools for each individual, as indicated by the school statistics for 1916,[1] was only 5.96, or less than the completion of the sixth grade for an *average education* for the citizens of the greatest democracy in the world.

2. The total high school enrolment for 1916 was only 8¼ per cent of the enrolment of the elementary schools. Assuming that the schools should hold students at least thru the high school, and that the high school course extends over 4 years and the elementary over 8, we might expect to find the high school enrolment nearly 50 per cent of the enrolment in the elementary schools, making a slight allowance for death rate. Instead, we find 8¼ per cent, or only one out of every six of those who should be in attendance. The "holding power" of the school is a mythical quantity.[2] Its "dropping power," however, is not only a reality but so effective that of 100 children starting the first grade together, *30* are dropt before they finish the sixth grade, *30* of the remaining *70* are dropt before completing the eighth grade; of the *40* graduating from the eighth grade, *30* more are dropt before graduation from high school. About eight more are dropt before college and about one of the two remaining educational pilgrims completes his college course.[2]

3. There are more than 5,000,000 persons in the United States over ten years of age (about one in every twenty) who can neither read nor write.[3] If we consider as illiterate all who are not able to read a newspaper and write a simple letter, the above figures would be increast four times, or to one person in five.[4] There are many thousands of children in the United States attending schools in which not a word of English is spoken during the entire day.

4. Of the 3,208,446 men examined by the Draft Boards of the United States, 949,419 were declared physically unfit for general military service.[5] Considering that these were men in the prime of life, and assuming that even the same proportion would hold for younger and older men and for women, it would indicate that there are 30,000,000 persons in the United States who are to a greater or less degree physically inefficient.

---

[1] Report of Commissioner of Education—Volume II—1917—p. 24.

[2] Educational Administration—Strayer and Thorndike—Sec. 2—Macmillan Co.

[3] N. E. A. Bulletin—April, 1919—p. 13.

[4] Based on findings of the Psychological Division of the Surgeon-General's Office on the examination of 1,552,256 men.

[5] Report of Provost Marshal General—1918—p. 153.

5. About 4,000,000 children are taught by teachers less than 21 years of age, with little or no high school training, with no professional preparation for their work, and who are, in a great majority of cases, products of the same schools in which they teach.[1]

6. The normal schools and teacher-training institutions of the country found their attendance cut from 5 to 46 per cent, during the two years of the war, thus further decreasing the inadequate source of supply.[2]

7. Thousands of *children* were urged to leave school and enter some shop or war work industry in order that they might more directly "serve their country," and attendance laws were more laxly enforced in order to make this possible.

To meet the above conditions educators were able to offer prospective teaching recruits an opportunity to serve, to do work which is enervating, with many outside demands and long irregular hours, at an average yearly salary of $630.64[3]—less than $55 a month.

Early in 1917, when the nation was giving its united effort to winning the war, the shortcomings as well as the unrealized possibilities of the schools were so vividly seen by men and women prominent in education that the situation was referred to as "The Emergency in Education." When the matter was brought before the National Education Association and the Department of Superintendence, the "Commission on the Emergency in Education and the Program for Readjustment During and After the War" was formed. This Commission realized the imminence of the danger and inaugurated a campaign, more inclusive than any ever undertaken in this country along educational lines, to study the situation, enlist the profession and inform the people. It was evident from the discussions of the first meeting that the schools of the country had failed to meet entirely their educational responsibilities in the past; that they had allowed, and, in some cases, caused serious inequalities to exist; and that they were not making the adjustments necessary to meet either the needs of war-time or the reconstruction period to follow. Five problems imprest the Commission as being national in their scope and in need of immediate action. These were (1) the removal of illiteracy, (2) the Americanization of foreigners, (3) the equalization of educational opportunities, (4) the promotion of physical and health education and recreation and (5) the preparation of teachers, particularly for the rural schools. Committees were appointed and investigations immediately started.

Early in these investigations it was found that sooner or later nearly

[1] Based on estimates given in N. E. A. National Program for Education—Commission Series 3—p. 94.

[2] Brown, J. C., "State Normal Schools and the War"—School and Society, Volume 7—p. 695.

[3] From Estimates of Commissioner of Education—N. E. A. Bulletin for April, 1919—p. 14.

all of the problems involved the *economic aspects* of teaching. As a consequence one of the three big National Education Association problems for 1919 was a campaign for better salaries thruout the United States. The first phase of this was the disclosure of the alarming shortage of teachers existing in all sections of the country. Even in the larger cities where salaries were higher than elsewhere and living conditions more congenial, the school boards could not begin to fill the vacancies caused by the inroads of various war activities. In New York City, as an example, the shortage was so great that in February, 1919, in 278 of the schools of the city, 19,901 registered pupils reporting at schools received absolutely no instruction.[1] Superintendents and principals put forth every effort to relieve the situation. Classes were doubled, kindergarten teachers were used in the upper grades, but thousands of children were daily turned from the schools to the streets. Every effort was made to increase the supply, particularly of substitute teachers, but there were few applicants for examination, and fewer students enrolled in the city training schools for teachers. Demobilization camps were canvast for teaching recruits, but because there were relatively few with the necessary preparation, and because there is a rapidly growing feeling that teaching is not a man's task, these canvassings brought almost no returns.

The New York City situation was practically duplicated in every large industrial city where war industries caused an increase in urban concentration of population. In the *rural* districts where the inducements to enter or stay in teaching work are vastly fewer than in the cities, the situation was proportionately worse. Whole sections of States were unable to open the rural schools in the poorly paid and less favorably situated districts. One county in Pennsylvania reported fifty-three of its rural schools without teachers. According to an estimate of the United States Commissioner of Education, the nation was more than 50,000 teachers short of the number required to provide schooling for its children—the schooling which should be guaranteed these children if we are to be a democracy in more than name only.

This shortage, which was *more than twice the total number* of graduates of all the public and private normal schools in the entire country during the preceding year, existed after over 120,000 inexperienst, untrained, immature or "erstwhile" teachers had been introduced into the schools in a valiant, tho often misguided effort to open the schools. This effort was misguided in that many of the schools would have been better unopened than to have the teachers they were compelled to take. The real shortage, then, may fairly be estimated at nearly 170,000 teachers.

[1] The Globe and Commercial Advertiser—Wed., February 19, 1919—Article by T. W. Metcalfe.

This exodus from a time-honored and socially respected form of public service into the fields of stenography, bookkeeping, card-filing, indexing, time-keeping, salesmanship, clerking and farm work, to say nothing of the fields of work where the incentive of more direct war service was added, such as nursing, reconstruction work, decoding messages, motor driving, etc., really threatened the efficiency if not the existence of our system of public education. It was by no means entirely caused, as some have said, by an intense desire on the part of patriotic teachers to be of service in helping to win the war, nor by a feeling that one was rendering a finer service by taking the place of a man in the local grocery store than by teaching forty young citizens at school. It was caused, rather by the ability of these teachers to earn from 25 per cent to 100 per cent more salary in these other occupations. The various governmental departments were among the heaviest bidders for these teachers. Thousands of teachers left their positions and their annual salaries of from $500 to $600, to work for the government for $1,100 to $1,500. The following advertisement from the March, 1919, number of a State educational journal shows that this is still a factor in competition:

> TEACHERS—GET U. S. GOVERNMENT JOBS
>
> All teachers, both men and women, should try the Government examinations soon to be held thruout the entire country. Reconstruction work necessitates thousands of appointments. The positions pay from $1,100 to $1,500; have short hours, annual vacations, and are permanent.
>
> Those interested should write immediately to.....
> .....for large descriptive book, showing the positions open and giving many sample examination questions, which will be sent free of charge.

Unfortunately for our schools the teachers who left because of these inducements have not returned and will not return in any large numbers. They have discovered that there are many opportunities open to women in other fields—fields in which they can earn a much more comfortable living, have easier hours, less fatiguing work, and more freedom. These causes, then—strictly war-caused in their first appearance—are remaining in operation, and will do so until the public school service can be made *more* attractive financially than the other lines of work. This cannot be done until we have a universal realization of the vital part played by the schools in the social and political life of any country, and particularly in the country that the world looks to as exemplifying on the largest scale the ideals of true democracy.

As a people, we have been slow to assign to the school a leading part in our drama of socialization. When, however, it became necessary to secure a national conviction on any topic, when it seemed

advisable to start the whole country on a policy of thrift, or when some form of service was needed by Food Administration, Red Cross or other organization, there was an immediate appeal to the school as the means of reaching the greatest number in the most thoro way. Early in our participation in the war there were *250* listed agencies[1] directly or indirectly using the schools to further their causes. If this seems wise and can be done in the stress of war, it could and should be done in a regulated way during times of peace.

Our frantic appeal to the schools to help in this emergency was an admission that they, as a force for shaping public opinion, had been neglected in the past. Shall we now again neglect this force which proved so helpful in securing national co-operation and in shaping public ideals? Are there not problems before us as a nation, which must be met largely by the aid of the schools?

There has been no armistice declared, and we hope there never will be a treaty signed between education and the forces which strive against mutual understanding, socialization and progress—in a word, against civilization. The problems of reconstruction, world reconstruction, face the schools and their product of the next few years. Can we trust the execution of a work so important to our numerically depleted, poorly prepared, and financially underpaid teaching force, or to the recruits who may enter under conditions which now exist? For reasons which will be shown, the point of immediate attack for the improvement of present educational conditions is the financial one.

No adjustment of the salary situation can be either satisfactory or lasting until it is based upon sound economic principles. Careful studies of the whole situation in its economic, sociological and educational aspects must be made, and salary schedules must be based upon the findings of such studies. Salary adjustments can no longer be based on pity, condescension, or public charity in the form of temporary bonuses, nor can they be made by "flat increases" either in dollars or per cents.

The National Education Association has conducted such a study this year, in the hope that its findings may be profitable, not only to the teachers concerned, but to the patrons of public schools in America who, because of their belief in universal education and their faith in democracy, control in a large measure the efficiency of our educational system by the enlightened way in which they financially support it.

It is intended that this report shall assist in the solution of the salary problem for teachers in three ways: (1) by serving to stimulate the interest of the teachers and school patrons of the country in the problem of better pay for teachers; (2) by furnishing material

[1] N. E. A. Pamphlet—"Thru the Schools in War Time."

and suggestions to be used by superintendents and teachers in their local campaigns for better salaries; and (3) by encouraging school officials or teachers' organizations everywhere to make careful investigations of their local conditions and problems, in order that teachers' salary schedules may be based upon business principles and prevailing economic conditions, rather than upon tradition and sentiment.

PART II—SALARIE

Directions: In answering the following questions,

(1) Answer set "A" for elementary school teachers, set "B" for intermediat

(2) Where accurate figures are not available, give estimates.

(3) Make all financial figures and estimates cover a period of 12 months.

SET "A" ELEMENTARY SCHOOLS including grades 1, 2, 3, 4, 5, 6, and where no separate intermediate school is maintained grades 7 and 8 also.	1. How many months are these schools in sessic 2. Do you have an establisht salary schedule fo 3. What is the minimum for elementary teache 4. What is the maximum for elementary teache 5. What is the annual increase for elementary 6. Upon what conditions does the granting of 7. What does good board and a comfortable ro 8. Is teaching experience a prerequisite to elect How much?..... 9. State the number of years in academic and p schools.....
SET "B" INTERMEDIATE SCHOOLS (Jr. H. S.) including grades 7 and 8 or 7, 8, and 9, when maintained as separate divisions of the school.	1. How many months are these schools in sessic 2. Do you have an establisht salary schedule fc 3. What is the minimum for intermediate teac 4. What is the maximum for intermediate te 5. What is the annual increase for intermedia 6. Upon what conditions does the granting of 7. What does good board and a comfortable roc 8. Is teaching experience a prerequisite to elect How much?..... 9. State the number of years in academic and pr schools.....
SET "C" HIGH SCHOOL including grades 10, 11 12 where intermediate schools are maintained, otherwise grades 9, 10, 11, and 12.	1. How many months are these schools in ses 2. Do you have an establisht salary schedule fo 3. What is the minimum for high school reac 4. What is the maximum for high school teac 5. What is the annual increase for high school 6. Upon what conditions does the granting of 7. What does good board and a comfortable roo 8. Is teaching experience a prerequisite to elec How much?..... 9. State the number of years in academic and p .....

Note: If you have a printed salary schedule, please enclose a copy of

:S PAID TEACHERS, 1918-1919

e school teachers (Junior H. S.) and set "C" for high school teachers.

)n?.....
r elementary school teachers? .....
rs?.....
rs?.....
teachers?.....
this increase depend?.....
om cost an elementary school teacher in your community (12 months)?.....
on in your elementary schools?.....
.....
rofessional preparation above the 8th grade which is a prerequisite to election in your elementary
.....

)n?.....
r intermediate school teachers? .....
hers?.....
achers?.....
te teachers?.....
this increase depend?.....
)m cost an intermediate school teacher in your community (12 months)?.....
ion in your intermediate schools?.....
.....
ofessional preparation above the 8th grade which is a prerequisite to election in your intermediate
.....

sion?.....
r high school teachers? .....
hers?.....
hers?.....
teachers?.....
this increase depend?.....
m cost a high school teacher in your community (12 months)?.....
tion in your high schools?.....
.....
rofessional preparation above the 8th grade which is a prerequisite to election in your high school
.....

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CHAPTER I.

The Salary Situation in the United States as Shown by Reports from Three Hundred and Ninety-two City and County Superintendents.

During February, 1919, the following letter was sent out from the National Education Association Headquarters in Washington to selected cities and counties of all sizes in all sections of the country.

January 31, 1919.

To the Superintendent of Schools:

The National Education Association wants to help solve the problem of teachers' salaries. In order to get the information which will be most helpful to superintendents and teachers thruout the country, it is necessary to have your assistance. I am enclosing herewith two forms.

On the first of these blanks you are askt to report the salaries of all teachers now in the employ of your school system according to a schedule which appears on the form, and to answer certain other questions which are of importance to all who have the problem of the increase of teachers' salaries before them for consideration. Will you not have this form filled out immediately and return it to me. The data included on this form we can put into shape very rapidly.

The other form is an individual teacher's blank. In order to save the very great expense in postage I am asking that you mimeograph this blank exactly as it appears on the sheet enclosed, and that you have it filled out by your teachers and sent to me as soon as possible. If you find it impossible to take care of this matter for me, will you not turn it over to your local teachers' association. We must have prompt assistance of all school systems receiving this request in order to make the study useful for those who hope to use our data in the development of new salary schedules for next year. Kindly send reports to me at 1400 Massachusetts Avenue, Washington, D. C.

I know that I can count on you and your teachers to co-operate with us in this work. The efficiency of American Schools and the future of our profession are involved in the movement to secure a living and a saving wage for teachers.

Yours faithfully,

George D. Strayer.

The questionnaire blank to be filled out by the superintendents is given on the following insert.

The blank to be mimeographt or printed and filled out by the individual teachers.

THE SALARIES OF TEACHERS IN THE UNITED STATES

To the Teachers of the United States:

The information requested below is desired by the National Education Association in order to aid in securing adequate salaries for teachers thruout the country. You are vitally interested in the results. All information will be used in an entirely impersonal way—be frank and as accurate as possible. Fill out the blank today.

Very cordially yours,
George D. Strayer,
President of the N. E. A.

1. State .....City .....School .....Date .....
2. Name .....Age....Sex.....Married? Yes....No....
3. How many persons are entirely dependent upon you for support?.....
   How many in part dependent upon you for support?.....
4. Are you teaching in kindergarten?.....elementary?.....intermediate?.....or high school?.....What grade or subject?.....
   Are you a principal?.....What part of your time do you teach?.....
   Are you a supervisor?.....What do you supervise?.....
5. Number of years experience in rural schools?.....kindergarten?.....
   graded schools?.....intermediate schools (Junior or H. S.)?.....
   high schools?.....normal or college?.....In present system?.....
   Total number of years teaching experience?.....Give accurate amounts or careful estimates for the items below. Each amount or estimate should include a period of twelve months.
6. Annual salary received from the school..1917-18.....1918-19.....
7. Number of months taught during.....1917-18.....1918-19.....
8. Bonus, if any, received from the school..1917-18.....1918-19.....
9. *Additional* income, not included above, for tutoring, evening school, summer work, writing, lecturing, etc.....1917-18.....1918-19.....
10. Annual amount spent for *personal living expenses:* room rent, board, clothes, car fare, medical attention, etc.....1917-18.....1918-19.....
11. Annual amount spent for your recreation, books, magazines, travel, professional advancement, etc. .....1917-18.....1918-19.....
12. How many years did you attend high school?.....Did you graduate?...
    How many years did you attend H. S. training class?....Did you graduate?...
    How many years did you attend normal school?.....Did you graduate?...
    How many years did you attend college or Univ.?.....Did you graduate?...
    How many years did you attend special schools?.....Did you graduate?...
    In the above figures, no year of training or study should be listed in more than one place.

Please write distinctly. Make explanatory notes on back.

The administrative problems of cities vary with the size and location of the city. Consequently, it seemed advisable to separate the cities into size groups and geographical groups in order to make the

collected data on salaries more immediately comparable with the situation in any particular place.

The aim in determining the limits of the size groups was to secure sizes in which the administrative problems and the administrative machinery were more or less distinctly characteristic of cities of that size. The size groups as here explained will be used thruout the study.

Size I. Cities having a population of 100,000 or more.
Size II. Cities having a population of 50,000, but less than 100,000.
Size III. Cities having a population of 25,000, but less than 50,000.
Size IV. Cities having a population of 10,000, but less than 25,000.
Size V. Cities having a population of 5,000, but less than 10,000.
Size VI. Cities having a population of 5,000 or less.

In determining the size group for any city the population was taken, where possible, from "Estimates of Population for the United States for 1916," Bulletin 133 of the Bureau of Census. For cities not included in this list the population as given in the 13th Census for 1910 was used.

The aim in determining which states to include in the geographical groups was to secure groups in which the economic, natural, industrial and educational conditions were more or less distinctly characteristic of the states within that group. The geographical groups as here explained will be used thruout the study.

Group A. Eastern (Industrial), including Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island and Vermont.

Group B. Southern States, including Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, South Carolina, Tennessee, Texas, Virginia and West Virginia.

Group C. Great Lakes (Manufacturing), including Illinois, Indiana, Michigan, Ohio, Wisconsin.

Group D. Great Plains (Agricultural), including Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, Oklahoma and South Dakota.

Group E. Western, including Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington and Wyoming.

Other groupings are possible in which the states would be a little more homogeneous from the standpoint of educational problems, but not without increasing the number of groups which would complicate the tabulation of data beyond the advantage gained.

Three hundred and ninety-two replies were received from city and county superintendents in time to be incorporated in all the tables. Thirty-one came in too late to be used, save for special comparison in the distribution of salaries, and in five or six cases the blank was not filled out completely, and it was impossible to place it in its proper group.

The lists given in appendixes I and II give the cities included in the study, by groups. Any city can be located in the list by determining its size and geographical group. For example, Holyoke, Massachusetts, belongs in geographical group A and size group II. Similarly, St. Louis, Missouri, would be DI.

It is readily seen from an examination of this list of cities that, to a very markt degree, it is representative of American cities. Every city size of every geographical group is represented, and this representation is made by typical cities. The manufacturing center, the commercial center, the city with a large immigrant population, the mining center, the distributing center for agricultural districts and the health resort can all be found in the different size groups. The representative nature of the cities makes the results of the study even more significant and reliable. Only ten county superintendents had the blanks filled out in any number, so that the results of the study are more representative of city conditions than rural.[1] The effect of an introduction of more rural teachers into the study would materially decrease the median salaries found. This generalization is substantiated by the returns which were tabulated. It is also true that salaries are better in the rural communities which have a stronger county organization as compared with those in which the single school is the principal unit.

In the following tables the returns will be given according to size groups, and where desirable, by geographical groups also. In most of the questions studied the difference caused by the size of the city is greater, more significant and more usable than the difference caused by location, consequently where only one grouping is used it will be that of size.

New York City, Chicago and Philadelphia, cities whose populations are over a million, are not included in these tables because it was felt that, in many ways, their educational situation is unique, and also that because of their size and the number of teachers employed, they would unduly influence the returns from other cities.

The following terms will be used frequently and will need but a word of explanation.

A *Distribution* ("distribution table") is an arrangement of a group of measures in ascending (or descending) order, and indicates the number of times each measure is found in the cases under consideration.

The *First Quartile* (Q_1) or 25 percentile is that point on the scale below which fall exactly one-fourth of the distributed cases, and above which three-fourths of the distributed cases fall.

[1] The returns will be referred to in the study as "392 cities" reporting even tho this number included the ten counties.

The *Median* (mid-point) is that point on the scale which divides the distribution exactly in half, having one half of the cases fall below and the other half fall above.

The *Third Quartile* (Q_3) or 75 percentile is that point on the scale below which fall exactly three-fourths of the distributed cases, and above which one-fourth of the distributed cases fall.

The *Quartile Deviation* (Q) is one-half the distance on the scale between the first quartile and the third quartile. It is used as a convenient measure of variation, since from it, it is easy to determine the distance upon the scale which will include the middle fifty per cent of the cases, and thereby determine the closeness of the grouping of the individual cases about the median.

For purposes of computing medians and quartiles in this study the plan was adopted of making the steps take their names from the beginning of the steps. Thus, salary group $500 extends from $500 to $549.99. The first steps of all distributions are supposed to begin at zero and extend to the beginning of the next step. By using this arrangement for the steps it will tend to make all the medians and quartiles a little *higher* than they are in reality, because of the prevailing custom among school men of granting salaries, increases, etc., in round numbers. Thus, in the $500 salary group there will be more teachers receiving an even $500 than will be distributed between $500 and $549. It was considered that this "padding of salaries" was less harmful than the lack of uniformity, or than the additional work and chances of error involved in the other method. In all statements and computations involving salaries and other items the results have been computed to the nearest dollar or to the nearest unit. A few exceptions to this are necessary where several medians are so close that the fractions are necessary in order to make comparisons.

Part I of Questionnaire to Superintendents

In Tables I-IV inclusive the salaries of teachers of 392[1] cities are distributed according to city sizes. Separate distributions are made for elementary teachers, for intermediate teachers, for high school teachers and for all teachers combined. Elementary teachers' salaries, as shown in Table I, range from $200 to $2,200 for the entire group. The greatest range in any one group is in Size II, with a difference of $1,900 between the lowest and the highest.[2] The greatest difference between the median salaries of any two groups is $259. (I and V.)

[1] List of these cities given in Appendix I.

[2] There is a slight chance that a few of the higher salaries may be those of principals or special supervisors, even tho the blank stated that these were not to be included. Except in a few cases, where the salaries were verified, they were used as they were sent in by the superintendent.

TABLE I

ELEMENTARY TEACHERS' SALARIES FOR 1918 19 IN THE 392 CITIES REPORTING
(Distributed according to size of the cities and salaries received.)*

Salary Groups	Number of teachers in each size group						
	I	II	III	IV	V	VI	Totals
$ 200- 249	9				1		10
250- 299							
300- 349	15	3	21	15	112	10	176
350- 399	11		32	17	19	25	104
400- 449	19	33	59	9	42	28	190
450- 499	17	53	106	76	125	70	447
500- 549	80	49	129	181	177	127	743
550- 599	251	100	157	336	221	252	1317
600- 649	353	187	263	511	278	343	1935
650- 699	276	227	347	579	270	342	2041
700- 749	1001	229	407	489	260	386	2772
750- 799	1566	297	461	438	173	215	3150
800- 849	1369	320	631	500	146	149	3115
850- 899	720	358	618	339	103	87	2225
900- 949	1766	362	567	355	125	85	3260
950- 999	697	432	446	240	84	43	1942
1000-1049	725	428	363	308	49	49	1922
1050-1099	393	187	229	128	20	30	987
1100-1149	1153	127	154	131	5	25	1595
1150-1199	781	36	211	28	7	11	1074
1200-1249	560	93	317	71	8	7	1056
1250-1299	909	5	10	12	6	1	943
1300-1349	96	6	42	50	6	2	202
1350-1399	615	1	13	2	1	2	634
1400-1449	480	5	28	9	2	1	525
1450-1499	5			1		2	8
1500-1599	20	7	4	9	1		41
1600-1699	40	2	2	5	1		50
1700-1799	10		1	5			16
1800-1899	9	2		1			12
1900-1999		3				1	4
2000-2099		1					1
2100-2199				1			1
2200-2299		1					1
2300-2399							
2400-2499							
2500-2999							
3000-and over.							
Totals	13946	3554	5618	4846	2242	2293	32499
**Q1	$ 796	$ 751	$ 736-	$ 656	$ 569.	$ 609	$ 721
Median	936	889	866	774	677	693	856
Q3	1152	1002	997	920	801	782	1025
Q	178	126	131	132	111	87	152

* For explanation of size groups see page 9.
**For explanation of terms used see page 10 and 11.

It is noticeable that the median salary decreases with each lower size group, except between sizes V and VI, and that the quartile deviation is largest in the cities of Size I, indicating a wider range of salaries, and smallest in cities of Size VI, indicating a closer grouping around the median salary. In Group I seventy-five per cent of the teachers get *more* than $796, while in Group VI seventy-five per cent of the teachers receive *less* than $782. With the median salary in cities of Size VI, $243 less than in cities of Size I, and the quartile deviation also smaller, it is evident that the salary situation for elementary teachers is much worse in cities below 5,000 inhabitants than

TABLE II

INTERMEDIATE TEACHERS' SALARIES FOR 1918-19 IN THE 392 CITIES REPORTING
(Distributed according to size of the cities and salaries received.)*

Salary Groups	Number of Teachers in each size group						
	I	II	III	IV	V	VI	Totals
$ 200- 249							
250- 299							
300- 349					1		1
350- 399							
400- 449	2	1	1			1	5
450- 499		1	1	2		2	6
500- 549				7	17	4	28
550- 599	1		4	4	34	44	87
600- 649	4	1	3	12	29	21	70
650- 699		7	8	28	36	38	117
700- 749		16	9	27	43	59	154
750- 799	4	9	13	24	59	39	148
800- 849	5	9	20	43	36	27	140
850- 899	17	8	39	30	25	27	146
900- 949	4	22	61	38	49	15	189
950- 999	49	5	35	30	13	8	140
1000-1049	13	41	53	32	15	6	160
1050-1099	14	8	42	40	6	6	116
1100-1149	56	14	42	30	7	6	155
1150-1199	22	23	24	23	5	4	101
1200-1249	37	3	53	22	1		116
1250-1299	25		19	1		2	47
1300-1349	55		27	9	1		92
1350-1399	33			3			36
1400-1449	20		17	2	2		41
1450-1499	24	1	3				28
1500-1599	15		7				22
1600-1699	7		3	4	1		15
1700-1799	4		2	2			8
1800-1899	4		1	1			6
1900-1999	5			3			8
2000-2099				2			2
2100-2199	1						1
2200-2299							
2300-2399				1			1
2400-2499							
2500-2999							
3000-and over.							
Totals	421	169	487	420	380	309	2186
**Q1	$1072	$ 840	$ 919	$ 801	$ 669	$ 657	$ 777
Median	1226	1007	1047	943	775	738	951
Q3	1362	1092	1210	1098	905	844	1143
Q	145	126	146	149	118	94	183

*For explanation of size groups see page 9.
**For explanation of terms used see pages 10 and 11.

in those over 100,000. The median salary for elementary teachers in all groups is only $856. This means that 16,249 teachers of the 32,499 reported received less than $856 during the year 1918-19. This figure would have to be reduced materially to represent the median salaries of all elementary teachers because of the small representation of rural and village teachers. Since 86 per cent of the teachers represented in Table I are from cities above 10,000, a median of $856 is more directly comparable with the results of the study made by the National Education Association for 1917-18[1] in which the median salary for elementary teachers in 320 cities over 10,000 population was found to

[1] Teachers Salaries and Cost of Living 1918—page 58.

TABLE III

HIGH SCHOOL TEACHERS' SALARIES FOR 1918-19 IN THE 392 CITIES REPORTING
(Distributed according to size of the cities and salaries received.)*

Salary Groups	Number of teachers in each size group						
	I	II	III	IV	V	VI	Totals
$ 200- 249							
250- 299							
300- 349	2		1			1	4
350- 399			1		1		2
400- 449	3					1	4
450- 499		1	4			2	7
500- 549	2	1	6	4	2	1	16
550- 599			2	2	2	4	10
600- 649	4		5	8	11	13	41
650- 699	5	3	11	18	12	27	76
700- 749	7	12	16	33	31	62	161
750- 799	27	15	21	64	40	65	232
800- 849	17	15	45	92	102	136	407
850- 899	32	16	45	63	90	96	342
900- 949	63	35	73	148	138	173	630
950- 999	21	23	112	106	58	63	383
1000-1049	423	49	99	172	86	81	910
1050-1099	45	42	104	68	40	27	326
1100-1149	79	56	109	72	29	34	379
1150-1199	103	47	32	59	13	12	266
1200-1249	201	98	158	94	32	44	627
1250-1299	67	78	51	43	17	13	269
1300-1349	121	47	84	88	12	19	371
1350-1399	92	67	50	40	22	19	290
1400-1449	140	94	86	91	15	10	436
1450-1499	54	14	74	21	5	3	171
1500-1599	306	61	109	105	39	23	643
1600-1699	237	77	191	58	14	8	585
1700-1799	215	27	34	32	4	1	313
1800 1899	355	25	55	27	4	3	469
1900-1999	250	13	21	6	2		292
2000-2099	90	9	11	20	1	2	133
2100 2199	61	13	4	4	1		83
2200-2299	23	5	9	7			44
2300-2399	14		4				18
2400-2499	35	1		1			37
2500-2999			10	1			11
3000-and over			2				2
Totals	3094	944	1639	1547	823	943	8990
**Q1	$1171	$1121	$1034	$ 935	$ 853	$ 822	$ 991
Median	1513	1288	1242	1097	944	918	1224
Q3	1815	1482	1537	1383	1107	1039	1559
Q	322	181	252	224	127	109	284

*For explanation of size groups see page 9.
**For explanation of terms used see pages 10 and 11.

be $816. When this comparison is made and allowance made for the effect of Groups V and VI, it appears that the median salary for elementary teachers is from $40 to $50 more in 1918-19 than the previous year. This shows that there has been a rather general tho small increase during the year in teachers' salaries.

Table II shows the situation for intermediate teachers in the cities reporting intermediate schools. The range of salary for the entire group is $2,000, the same as for elementary teachers, but the range between median salaries of groups is $498 (I and VI) which is nearly double the difference found in elementary schools. The median salaries decrease with every decrease in city size, and are also in every case higher than for elementary teachers. The quartile deviation is more

TABLE IV

ELEMENTARY, INTERMEDIATE AND HIGH SCHOOL TEACHERS' SALARIES FOR 1918-19 IN THE 392 CITIES REPORTING

(Distributed according to size of the cities and salaries received)*

Salary Groups	Number of teachers in each size group.						
	I	II	III	IV	V	VI	Totals
$200- 249	9				1		10
250- 299							
300- 349	17	3	22	15	113	11	181
350- 399	11		33	17	20	25	106
400- 449	24	34	60	9	42	30	199
450- 499	17	55	111	78	125	74	460
500- 549	82	50	135	192	196	132	787
550- 599	252	100	163	342	257	300	1414
600- 649	361	188	271	531	318	377	2046
650- 699	281	237	366	625	318	407	2234
700- 749	1008	257	432	549	334	507	3087
750- 799	1597	321	495	526	272	319	3530
800- 849	1391	344	696	635	284	312	3662
850- 899	769	382	702	432	218	210	2713
900- 949	1833	419	701	541	312	273	4079
950- 999	767	460	593	376	155	114	2465
1000-1049	1161	518	515	512	150	136	2992
1050-1099	452	237	375	236	66	63	1429
1100-1149	1288	197	305	233	41	65	2129
1150-1199	906	106	267	110	25	27	1441
1200-1249	798	194	528	187	41	51	1799
1250-1299	1001	83	80	56	23	16	1259
1300-1349	272	53	153	147	19	22	665
1350-1399	740	68	63	45	23	21	960
1400-1449	640	99	131	102	19	11	1002
1450-1499	83	15	77	22	5	5	207
1500-1599	341	68	120	114	40	23	706
1600-1699	284	79	196	67	16	8	650
1700-1799	229	27	37	39	4	1	337
1800-1899	368	27	56	29	4	3	487
1900-1999	255	16	21	9	2	1	304
2000-2099	90	10	11	22	1	2	136
2100-2199	62	13	4	5	1		85
2200-2299	23	6	9	7			45
2300-2399	14		4		1		19
2400-2499	35	1		1			37
2500-2999			10	1			11
3000-and over			2				2
Totals	17,461	4667	7744	6812	3446	3545	43675
**Q1	$ 825	$ 788	$ 785	$ 692	$ 617	$ 642	$ 756
Median	1013	943	928	841	750	741	917
Q3	1254	1078	1122	1024	864	889	1132
Q	215	145	169	166	124	124	188

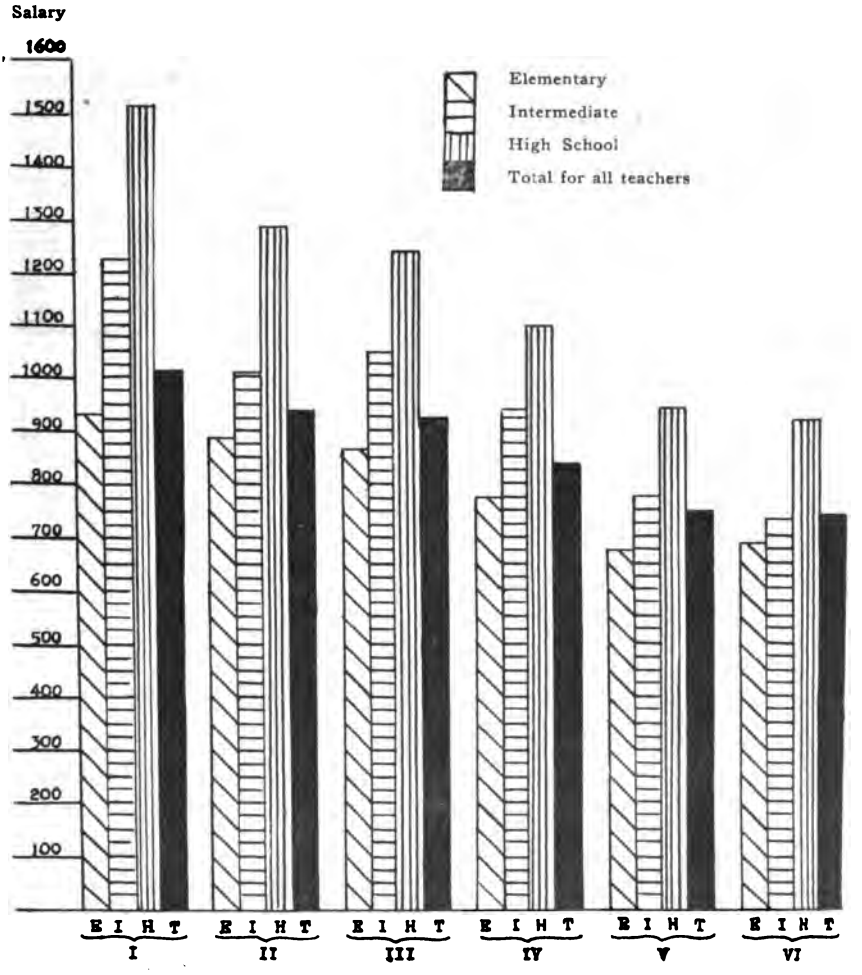
*For explanation of size groups see page 9.
**For explanation of terms used see pages 10 and 11.

uniform and in most groups slightly less than for elementary teachers. The intermediate school as a separate division of the school system is a development of recent years, and, in a majority of cases, was started with the best teachers in the system, which would partially account for the higher salaries. Another reason for this is the departmental organization of intermediate schools and the additional preparation demanded in many cases. In Groups I, II, III and IV the median salary for intermediate teachers is higher than the third quartile of elementary teachers in those groups.

Table III shows the distribution of salaries of high school teachers

CHART I

CHART SHOWING MEDIAN SALARIES FOR CITIES IN THE DIFFERENT SIZE GROUPS FOR ELEMENTARY TEACHERS, INTERMEDIATE TEACHERS, HIGH SCHOOL TEACHERS, AND FOR THE TOTAL OF THE THREE.



for the 392 cities reporting. The range of high school salaries is much more than for either elementary or intermediate, being at least $2,700. The greatest difference between median salaries of any two groups is $595. (I and VI.) This is nearly $100 more than the same difference for intermediate teachers, but is no more in proportion to the size of the median salaries.

The effect of the size of the city upon the salary paid is very noticeable, as in the intermediate salaries. The biggest difference between any two consecutive groups is between I and II, where the median salaries differ by $225.

The quartile deviation for high school teachers is larger and more varied than for elementary or intermediate teachers. A quartile deviation of $322 for cities in Group I shows a large variation in the salaries paid high school teachers in the larger cities, since the middle 50 per cent of the teachers spread over a range of $644. This is three time as large as the quartile deviation for cities in Group VI.

The comparison of the median salaries received by high school teachers with those of intermediate and elementary teachers brings very forcibly to light several conditions which school men have known to exist, and yet have done nothing to adjust.

High school salaries are as much higher than intermediate as the intermediate are higher than the elementary. Thus, from the standpoint of financial reward there is an advantage in changing from elementary to intermediate and from intermediate to high school. There is more preparation demanded in each of the two upper divisions also, but the decided increase in salary tends to take from the elementary field, particularly, the strongest and most ambitious teachers. The difference between the high school and the elementary salaries is particularly noticeable. In every size group of cities, the first quartile of the high school salaries is higher than the third quartile of the elementary salaries. In other words, three-quarters of the high school teachers receive more salary than the best paid quarter of all elementary teachers. Such a difference is so large that it becomes a social distinction and in several ways mitigates against the proper coordination of the different divisions of the schools. This difference in salary also makes it possible to demand more preparation on the part of the high school teachers, but does not add any incentive to further preparation for teaching in the elementary schools,—a work as important as any other.

Table IV which gives the distribution of the salaries for elementary, intermediate and high school teachers combined, shows the effect of the higher salaries paid the teachers in the two upper divisions in raising the median salaries over those for elementary teachers. The median salary for *all* teachers in cities of Group I is only $1,013. Half the teachers in these cities get less than $1,013 a year, less than $85 a month for the twelve months. This shows the seriousness of the salary problem in the larger cities. Some of these cities have already set the *minimum* salary at $1,200 a year, nearly $200 more than the present median salary.

TABLE V

ELEMENTARY TEACHERS' SALARIES FOR 1918-19 IN THE 392 CITIES REPORTING

(Distributed according to geographical grouping and salaries received.)*

Salary Groups	Number of teachers in each geographical group					
	A	B	C	D	E	Totals
$ 200- 249		10				10
250- 299						
300- 349	68	106			2	176
350- 399	9	68	13	14		104
400- 449	45	114	15	10	6	190
450- 499	91	247	68	34	7	447
500- 549	250	246	151	89	7	743
550- 599	568	328	256	161	4	1317
600- 649	754	448	417	201	65	1935
650- 699	815	267	526	239	94	2041
700- 749	925	943	473	260	171	2772
750- 799	829	1322	471	351	177	3150
800- 849	1135	729	453	516	282	3115
850- 899	899	402	335	381	208	2225
900- 949	666	1282	380	547	385	3260
950- 999	885	120	264	369	304	1942
1000-1049	825	91	194	408	404	1922
1050-1099	378	28	213	142	226	987
1100-1149	223	62	93	738	279	1595
1150-1199	113	59	160	91	651	1074
1200-1249	67	5	138	428	418	1056
1250-1299	101	7	6	610	219	943
1300-1349	19	5	32	58	88	220
1350-1399	13		5	72	544	634
1400-1449	16	1	14	15	479	525
1450-1499	6			1	1	8
1500-1599	13	2	10	11	5	41
1600-1699	13	1	6	15	15	50
1700-1799	9		5	2		16
1800-1899	3		1	8		12
1900-1999		3			1	4
2000-2099		1				1
2100-2199			1			1
2200-2299		1				1
2300-2399						
2400-2499						
2500-2999						
3000-and over.						
Totals	9738	7048	4900	5771	5042	32499
**Q1	$ 690	$ 669	$ 679	$ 808	$ 935	$ 721
Median	823	773	807	961	1132	856
Q3	964	888	972	1141	1271	1025
Q	137	110	147	167	168	152

* For explanation of geographical groups see page 9.
**For explanation of terms used see pages 10 and 11.

In tables V to VIII, inclusive, the salaries of teachers in 392 cities are distributed according to geographical grouping. Tables V, VI and VII give the distribution of elementary, intermediate and high school teachers' salaries, and Table VIII a combination of these three. These tables show that the range of salary is almost as great within a geographical group as it is within size groups. They also show that there is nearly as much difference between the median salaries of different geographical groups as there is between the median salaries of size groups. The median salaries for elementary, intermediate and high school teachers are higher in Group E than in any other group, and lower in Group B than in the others. The quartile devia-

TABLE VI

INTERMEDIATE TEACHERS' SALARIES FOR 1918-19 IN THE 392 CITIES REPORTING

(Distributed according to geographical grouping and salary received.)*

Salary Groups	Number of teachers in each geographical group					
	A	B	C	D	E	Total
$ 200- 249						
250- 299						
300 349	1					1
350- 399						
400- 449		3		1	1	5
450- 499	1	5				6
500- 549	3	19	1	5		28
550- 599	35	41	8	3		87
600- 649	22	26	15	6	1	70
650- 699	55	31	19	8	4	117
700- 749	30	25	51	29	19	154
750- 799	32	9	71	15	21	148
800- 849	38	15	38	26	23	140
850- 899	26	27	49	25	19	146
900- 949	24	29	54	47	35	189
950- 999	75	15	19	13	18	140
1000-1049	77	10	24	15	34	160
1050-1099	34	17	24	6	35	116
1100-1149	75	15	23	19	23	155
1150-1199	43	13	27	10	8	101
1200-1249	34	14	18	8	42	116
1250-1299	19	1	11	2	14	47
1300-1349	37	5	9	23	18	92
1350-1399	2	8	2	23	1	36
1400-1449	5	7	8	13	8	41
1450-1499	3	1		8	16	28
1500-1599	2	1	1	12	6	22
1600-1699	3		1	7	4	15
1700-1799	3		3	2		8
1800-1899	1		1	4		6
1900-1999			3	5		8
2000-2099			2			2
2100-2199				1		1
2200-2299						
2300-2399			1			1
2400-2499						
2500-2999						
3000-and over.						
Totals	680	337	483	336	350	2186
**Q1	$ 786	$ 631	$ 769	$ 833	$ 899	$ 777
Median	999	832	889	962	1000	951
Q3	1138	1039	1078	1330	1226	1143
Q	176	204	155	249	164	183

* For explanation of geographical groups see page 9.
**For explanation of terms used see pages 10 and 11.

tion differs as much as between size groups. For elementary teachers, Group E not only has the highest median salary, but also the largest quartile deviation. For intermediate teachers the largest quartile deviations are in Groups D and B, and for high school teachers they are in D and C. When all the teachers are considered together it is found that quartile deviations increase directly as the median salary increases. This is due to the fact that in any geographical section the salaries are increast by some states and not others, or by certain cities and not others, but in enough instances to increase the median salaries for the entire section. This leaves a greater difference, however,

TABLE VII

HIGH SCHOOL TEACHERS' SALARIES FOR 1918-19 IN THE 392 CITIES REPORTING

(Distributed according to geographical grouping and salaries received.)*

Salary Groups	Number of teachers in each geographical group					
	A	B	C	D	E	Totals
$ 200- 249						
250- 299						
300- 349						
350- 399	1	1		2		4
400- 449	1	1				2
450- 499	1	3				4
500- 549		6		1		7
550- 599	9	3	2	2		16
600- 649	2	4	4			10
650- 699	19	14	6	2		41
700- 749	28	34	8	6		76
750- 799	68	50	28	15		161
800- 849	76	63	59	30	4	232
850- 899	162	56	122	59	8	407
900- 949	101	46	112	60	21	342
950- 999	189	94	153	149	45	630
1000-1049	161	30	114	61	17	383
1050-1099	198	443	102	124	43	910
1100-1149	134	21	69	76	26	326
1150-1199	144	45	61	78	51	379
1200-1249	200	126	102	119	82	627
1250-1299	107	20	43	58	41	269
1300-1349	96	38	88	58	91	371
1350-1399	110	24	43	44	69	290
1400-1449	100	30	84	110	112	436
1450-1499	59	6	27	19	60	171
1500-1599	125	66	77	69	306	643
1600-1699	85	37	61	86	316	585
1700-1799	54	12	39	77	131	313
1800-1899	53	42	44	215	115	469
1900-1999	40	35	54	32	131	292
2000-2099	44	10	21	44	14	133
2100-2199	35	1	5	4	38	83
2200-2299	9	3	13	17	4	44
2300-2399	5		4	9		18
2400-2499	4		1	32		37
2500-2999	7		4			11
3000-and over.	1		1			2
Totals	2529	1440	1576	1694	1751	8990
**Q1	$ 943	$ 947	$ 917	$1015	$1341	$ 991
Median	1139	1036	1107	1273	1559	1224
Q3	1394	1236	1424	1708	1698	1559
Q	226	145	254	347	179	284

*For explanation of geographical groups see page 9.
**For explanation of terms used see pages 10 and 11.

between the places remaining on the old schedules and those on the new, and consequently, increases the quartile deviation.

Subsequent tables will show that the sectional differences which now exist in salaries are caused by several conditions. Some of these are traditional schedules, public indifference and the like, and such are easily removed. Some of the conditions, however, are more fundamental and involve the organization of school control, the lack of expert control of school budgets, and the very low per capita wealth in certain sections. These problems are harder to solve; as a matter of fact, under the present plan of free competition they

TABLE VIII

ELEMENTARY, INTERMEDIATE AND HIGH SCHOOL TEACHERS' SALARIES FOR 1918-19 IN THE 392 CITIES REPORTING

(Distributed according to geographical grouping and salaries received.)*

Salary Groups	Number of teachers in each geographical group					
	A	B	C	D	E	Totals
$ 200- 249		10				10
250- 299						
300- 349	70	107		2	2	181
350- 399	10	69	13	14		106
400- 449	46	120	15	11	7	199
450- 499	92	258	68	35	7	460
500- 549	262	268	154	96	7	787
550- 599	605	373	268	164	4	1414
600- 649	795	538	438	209	66	2046
650- 699	898	432	553	253	98	2234
700- 749	1023	1018	552	304	190	3087
750- 799	937	1394	601	396	202	3530
800- 849	1335	800	613	601	313	3662
850- 899	1028	475	496	466	248	2713
900- 949	879	1405	587	743	465	4079
950- 999	1121	165	397	443	339	2465
1000-1049	1100	544	320	547	481	2992
1050-1099	546	66	306	224	287	1429
1100-1149	442	122	377	835	353	2129
1150-1199	257	148	214	137	685	1441
1200-1249	301	145	256	555	542	1799
1250-1299	227	28	60	670	274	1259
1300-1349	152	48	129	139	197	665
1350-1399	125	32	50	139	614	960
1400-1449	121	38	106	138	599	1002
1450-1499	68	7	27	28	77	207
1500-1599	140	69	88	92	317	706
1600-1699	101	38	68	108	335	650
1700-1799	66	12	47	81	131	337
1800-1899	57	42	46	227	115	487
1900-1999	40	38	57	37	132	304
2000-2099	44	11	23	44	14	136
2100-2199	35	1	6	5	38	85
2200-2299	7	4	13	17	4	45
2300-2399	5		5	9		19
2400-2499	4		1	32		37
2500-2999	7		4			11
3000-and over	1		1			2
Totals	12,947	8,825	6,959	7,801	7,143	43,675
**Q1	$ 722	$ 702	$ 721	$ 839	$ 976	$ 756
Median	869	794	871	1015	1187	917
Q3	1028	927	1074	1233	1398	1132
Q	153	113	177	197	211	188

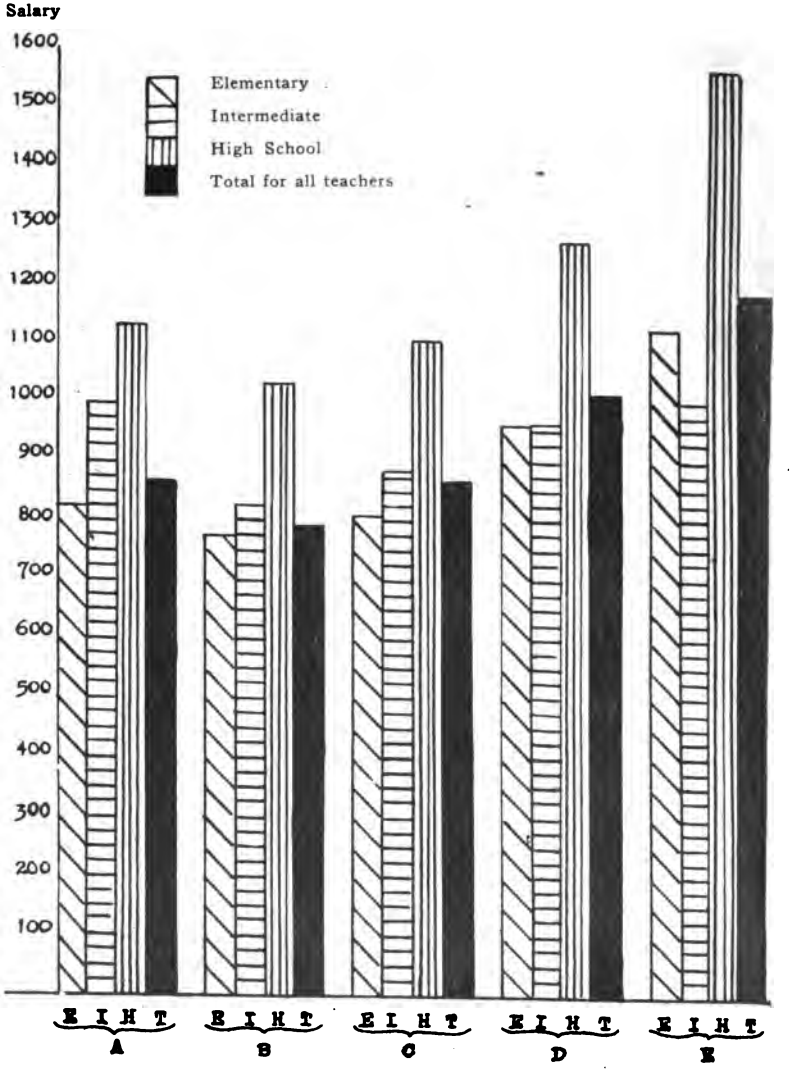
*For explanation of geographical groups see page 9.
**For explanation of terms used see pages 10 and 11.

are constantly growing worse. For example, many districts in Section B are carrying the maximum tax allowed by law for school purposes, and are yet unable to meet the salary schedules of other sections. They are, therefore, compelled to take inferior teachers or teachers with less professional training, which will, in turn, tend to decrease the per capita wealth still more, in spite of the fact that the particular community is more progressive educationally and carries a heavier tax burden than other places which outbid it for teachers.

Some of the findings of this study of teachers' salaries will show the extent to which these conditions exist, and where possible, will be made to throw light on the remedy. It is obvious that as prices of food, clothing, labor, cost of education, etc., are becoming standardized for the nation, there should not be a sectional difference in median

CHART II

CHART SHOWING MEDIAN SALARIES FOR CITIES IN THE DIFFERENT GEOGRAPHICAL GROUPS FOR ELEMENTARY TEACHERS, INTERMEDIATE TEACHERS, HIGH SCHOOL TEACHERS, AND FOR THE TOTAL OF THE THREE.



salaries for elementary teachers of $359 or 46 per cent (between B and E).

In connection with the salaries paid in the 392 cities, as shown in the preceding tables, comparisons with those paid in New York City for the same period are valuable. A distribution was made from the salaries as recorded in the "Tentative Budget Estimate for 1919 of the Board of Education of the school district of New York, N. Y." which was adopted August 29, 1918, and so represents the salaries for the

TABLE IX

Distribution of Salaries of Men and Women Teachers in the Day Elementary Schools of New York City for the School Year 1918-19.

Salary Groups	Men	Women	Totals
$ 800- 849	67	2153	2220
850- 899		78	78
900- 949	5	2830	2835
950- 999	1	748	749
1000-1049	57	533	590
1050-1099	1	755	756
1100-1149	17	567	584
1150-1199		82	82
1200-1249	125	666	791
1250-1299	1	701	702
1300-1349	23	621	644
1350-1399		383	383
1400-1449	49	596	645
1450-1499		14	14
1500-1549	63	3737	3800
1550-1599	1	80	81
1600-1649	19	84	103
1650-1699	33	105	138
1700-1749	51	100	151
1750-1799	1	20	21
1800-1849	91	1488	1579
1850-1899	1	453	454
1900-1949	14	52	66
1950-1999	31	55	86
2000-2049	9	1	10
2050-2099	12	47	59
2100-2149	52	3	55
2150-2199	32		32
2200-2249	1		1
2250-2299	31	3	34
2300-2349	1		1
2350-2399			
2400-2449	547	4	551
2450-2499			
2500-2549			
2550-2599			
2600-2649			
2650-2699		1	1
Totals	1336	16,960	18,296
**Q1	$1438	$ 936	$ 941
Median	2083	1255	1279
Q3	2420	1527	1536
Q	491	296	298

**For explanation of terms used see pages 10 and 11.

school year 1918-19. Tables IX and X give the distributions for men and for women in the day elementary schools and in the day high schools. The median salary for men in the elementary schools is over $800 more than the median salary for women. This is due to the double basis for granting salaries which, until recently, existed in New York City. The men are, however, such a small proportion of the total number in the elementary schools that their higher salaries only raise the median for the entire group by $24. The quartile deviation for the men is very large, due to the large number of men who have reacht the maximum of $2,400, and the relatively low salaries of the men who have entered since the "equal pay for equal work" plan was adopted. The median salary of $1,279 for New York City is $343 more than the median salary for all cities in this study

TABLE X

Distribution of Salaries of Men and Women Teachers in the Day High Schools of New York City for the School Year 1918-19.

Salary Groups	Men	Women	Totals
$ 900- 949	11	18	29
950- 999			
1000-1049	28	33	61
1050-1099			
1200-1249			
1250-1299			
1300-1349	41	2	43
1350-1399			
1400-1449			
1450-1499	22	32	54
1500-1549			
1550-1599			
1600-1649	25	41	66
1650-1699			
1700-1749	4	1	5
1750-1799	34	44	78
1800-1849			
1850-1899			
1900-1949	43	56	99
1950-1999			
2000-2049			
2050-2099	96	135	231
2100-2149			
2150-2199	3		3
2200-2249	25	44	69
2250-2299			
2300-2349	11	21	32
2350-2399	37	37	74
2400-2449	9	1	10
2450-2499			
2500-2549	126	110	236
2550-2599			
2600-2649			
2650-2699	308	485	793
2700-2749			
2750-2799			
2800-2849			
2850-2899			
2900-2949	4		4
2950-2999			
3000-3049			
3050-3099			
3100-3149			
3150-3199	96	27	123
3200-3249			
3250-3299	1		1
Totals	932	1155	2087
*Q1	$2059	$1944	$2052
Median	2527	2520	2524
Q3	2679	2673	2675
Q	310	364	311

**For explanation of terms used see pages 10 and 11.

with more than 100,000 population, and is $423 (nearly ½) more than the median salary of the 392 cities reporting.

There is not such a difference between the median salaries of men and women in the high school as is found between the salaries of elementary teachers. The median salary for men is only $7 more than that for women, and the quartile deviation is smaller by $45. The significant fact about the median high school salary in New York City is that it is $1,011 (67%) higher than the median high school salary for cities in Group I, and $1,300 (106%) higher than the median

TABLE XI

DISTRIBUTION OF SALARIES OF ELEMENTARY TEACHERS IN NEW YORK, PITTSBURGH AND NEWARK, COMPARED WITH TWO OTHER GROUPS OF CITIES

Salary Groups	1 New York City	2 Pittsburgh	3 Newark	4 Total for 1, 2 & 3	5* Total 29 Cities	6 Total 392 Cities	7 Totals for 4, 5 & 6
$200- 249						10	10
250- 299							
300- 349						176	176
350- 399						104	104
400- 449					34	190	224
450- 499					6	447	453
500- 549					102	743	845
550- 599		4		4	120	1317	1441
600- 649			3	3	239	1935	2177
650- 699					222	2041	2263
700- 749		294	94	388	349	2772	3509
750- 799		71	22	93	337	3150	3580
800- 849	2220	76	171	2467	326	3115	5908
850- 899	78	66	68	212	287	2225	2724
900- 949	2835	41	105	2981	519	3260	6760
950- 999	749	58	79	886	422	1942	3250
1000-1049	590	180	65	835	601	1922	3358
1050-1099	756	58	53	867	495	987	2349
1100-1149	584	734	87	1405	232	1595	3232
1150-1199	82	19	1	102	166	1074	1342
1200-1249	791	244	103	1138	383	1056	2577
1250-1299	702			702	72	943	1717
1300-1349	644	4	475	1123	448	202	1773
1350-1399	383			383	6	634	1023
1400-1449	645	3	69	717	18	525	1260
1450-1499	14			14	8	8	30
1500-1599	3881	12	175	4068	1	41	4110
1600-1699	241	32	69	342	7	50	399
1700-1799	172		14	186	2	16	304
1800-1899	2033		48	2081		12	2093
1900-1999	152		2	154		4	158
2000-2099	69		2	71		1	72
2100-2199	87			87		1	88
2200-2299	35			35		1	36
2300-2399	1			1			1
2400-2499	551			551			551
2500 2999	1			1			1
3000-and over.							
Totals	18296	1896	1705	21897	5412	32499	59808
**Q1	$ 940	$ 872	$ 933	$ 939	$ 792	$ 721	$ 802
Median	1283	1107	1300	1231	969	856	948
Q3	1568	1139	1345	1552	1100	1025	1222

*For list of these 29 cities see those marked with a * in Appendix I.
**For explanation of terms used see pages 10 and 11.

salary for all high school teachers in 392 cities. In order to have some results of this study available to school men by the close of the school year it was found necessary to close the tables before the returns were received from Pittsburgh, Pa., and Newark, N. J. Since they are both large industrial cities in Group A, Size I, their distributions have been combined with those of New York in order that they may be compared not only with the returns from the 392 cities previously reported, but also with a summary of 29 other cities[1] whose replies were received too late to be incorporated in the main study.

[1] The 20 cities included in this distribution are starred * in the list in Appendix I.

TALBE XII

DISTRIBUTION OF SALARIES OF HIGH SCHOOL TEACHERS IN NEW YORK, PITTSBURGH AND NEWARK, COMPARED WITH TWO OTHER GROUPS OF CITIES

Salary Groups	1 New York City	2 Pittsburgh	3 Newark	4 Total for 1, 2 & 3	5* Total 29 Cities	6 Total 392 Cities	7 Totals for 4, 5 & 6
$ 200- 249							
250- 299							
300- 349						4	4
350- 399						2	2
400- 449						4	4
450- 499						7	7
500- 549			4	4		16	20
550- 599			3	3	2	10	15
600- 649		1	4	5	2	41	48
650- 699			1	1	7	76	84
700- 749			1	1	8	161	170
750- 799			1	1	27	232	260
800- 849			1	1	27	407	435
850- 899					20	342	362
900- 949	29	2	3	34	48	630	712
950- 999					27	383	410
1000-1049	61	8	1	70	90	910	1070
1050-1099					49	326	375
1100-1149		18	1	19	99	379	497
1150-1199					60	266	326
1200-1249		5	6	11	133	627	771
1250-1299		1		1	56	269	326
1300-1349	93	11	8	112	132	371	615
1350-1399		1		1	47	290	338
1400-1449		16	12	28	123	436	587
1450-1499	54			54	28	171	253
1500-1599		18	21	39	146	643	828
1600-1699	66	39	13	118	202	585	905
1700-1799	83	36	1	120	33	313	466
1800-1899		38	18	56	71	469	596
1900-1999	99	40	3	142	25	292	459
2000-2099	231	26	10	267	5	133	405
2100-2199	3	32	10	45	4	83	132
2200-2299	69	23	24	116		44	160
2300-2399	106	17	12	135	2	18	155
2400-2499	10	59	11	80		37	117
2500-2999	1033		64	1097		11	1108
3000-and over.	124		18	142		2	144
Totals	2061	391	251	2703	1473	8990	13166
**Q1	$2013	$1643	$1580	$1894	$1132	$991	$1035
Median	2512	1904	2215	2376	1332	1224	1357
Q3	2562	2205	2530	2551	1583	1559	1790

*For list of these 29 cities see those marked with a * in Appendix I.
**For explanation of terms used see pages 10 and 11.

Table XI for elementary teachers shows the median salary for Pittsburgh to be $1,150, and for Newark $1,300. A total for these 3 cities gives a median of $1,231. This is $262 higher than the median salary for elementary teachers in the 29 cities mentioned above, and $375 higher than the median salary in the 392 cities. The distribution of the 59,808 elementary teachers, which is the total for all cities in the report, including New York City, gives a median salary of $948. The difference between this and $856 for the 392 cities studied is largely the effect of including the New York City teachers in the distribution, and gives a median salary much too high to represent actual conditions as they are.

Table XII gives a similar distribution for high school teachers, and shows the median salary for New York, Pittsburgh and Newark to be $2,376, which is $1,044 more than the median salary for the 29 cities, and $1,152 more than the median salary for the 392 cities. The median salary for the total distribution for all cities, including New York, is $1,357, due again largely to the salaries of the 2000 New York high school teachers for whom the median salary is more than $2,500. The differences between salaries in different city groups and in different sections, as evidenst by the above tables, are relatively very small in comparison with the differences existing between individual cities. Included in the distributions are the following cities paying their elementary teachers a median salary of $1,300 or more: Newark, New Jersey, $1,300; Anaconda, Montana, $1,301; Berkeley, California, $1,310; Oakland, California, $1,359; Cleveland Heights, Ohio, $1,413; Seattle, Washington, $1,421. Included in the distribution also are cities paying medium salaries of less than half of these figures,—$540, $532, $519, and $333 are actual median salaries paid to elementary teachers in cities and towns of over 5000 population. The difference between cities in the matter of median salaries for high school teachers is much more than between elementary teachers, varying between New York City, with its median of $2,500, to some of the small high schools, paying median salaries of about ¼ of this. A study of the distributions of salaries for elementary and high school teachers for individual cities will convince anyone that the settlement of the salary problem up to the present time has been purely a matter of local adjustment, the result of a progressive superintendent, of an active teacher's organization or the recognition of the importance of teaching by a group of progressive citizens within a community. There is no evidence within any city size or geographical group of a united attempt to in any way standardize salaries paid, or to make a general adjustment of teachers' salaries to living conditions.

"What increases in salary were granted to each group this year?" [1] was the next question askt on the questionnaire to superintendents. A distribution of the teachers receiving increases, regardless of the amount of the increase, arranged according to the salaries of the teachers receiving these increases, results in the following quartile distributions.

A comparison of the medians and the median deviations of the salaries of teachers receiving increases with the medians and median deviations of the actual salary distributions as given in Tables I-VIII, inclusive, and summarized in Table XIII, will show: first, that the median salaries of those receiving increases are in most cases slightly

[1] For copy of questionnaire see insert after page 7.

TABLE XIII

QUARTILE DISTRIBUTIONS OF SALARIES OF TEACHERS RECEIVING INCREASES DURING 1918-19.

(Arranged according to Size and Geographical Groups* for Elementary, Intermediate and High Schoo' Teachers)

Size Groups	I	II	III	IV	V	VI	Totals
Elementary							
No. of Teachers	9637	2983	4792	4299	1766	1968	25445
**Q1	$ 808	$ 754	$ 758	$ 622	$ 563	$ 634	$ 702
Median	902	893	874	781	672	693	844
Q3	1184	1031	1006	920	791	782	1013
Q	188	139	124	129	114	74	156
Intermediate							
No. of Teachers	953	176	374	404	355	286	2548
**Q1	$ 773	$ 789	$ 917	$ 802	$ 670	$ 651	$ 804
Median	796	980	1030	950	773	734	876
Q3	1074	1058	1083	1100	853	829	1047
Q	151	135	83	149	92	89	122
High School							
No. of Teachers	2481	822	1344	1367	709	839	7562
**Q1	$1120	$1105	$1046	$ 932	$ 858	$ 818	$ 982
Median	1469	1304	1260	1092	904	916	1210
Q3	1741	1519	1525	1352	1105	1037	1520
Q	311	207	240	210	124	110	269

Geographical Groups	A	B	C	D	E	Total
Elementary						
No. of Teachers	7723	5775	4246	3196	4505	25445
**Q1	$ 690	$ 693	$ 685	$ 779	$ 940	$ 702
Median	808	796	811	917	1154	844
Q3	943	886	971	1088	1302	1013
Q	132	97	143	155	181	156
Intermediate						
No. of Teachers	662	910	457	255	264	2548
**Q1	$ 799	$ 809	$ 759	$ 849	$ 845	$ 804
Median	1005	831	871	936	970	876
Q3	1142	945	1049	1309	1084	1047
Q	172	68	145	230	120	122
High School						
No. of Teachers	2141	1319	1410	1141	1551	7562
**Q1	$ 942	$ 955	$ 923	$ 948	$1336	$ 982
Median	1128	1025	1124	1156	1533	1210
Q3	1369	1243	1436	1560	1783	1520
Q	214	144	257	306	224	269

*For explanation of size and geographica groups see pages 9.
**For explanation of terms used see pages 10 and 11.

below the median salaries of the groups, and second, that the quartile deviation is very nearly the same as in the distribution of the salaries received. The first point would indicate that there is a tendency to give increases to the lower salaried teachers more than to the upper, but this tendency is so slight that it hardly deserves the name even of a tendency. The second fact seems to contradict this conclusion by showing that increases are given over the entire range of salaries. It was also observed in examining the superintendents' blanks as they were returned, that where any increases were given they were generally given to all teachers. When any teachers were not given increases they were usually "new teachers."

A study of the increases given to teachers during 1918-19 which bears more directly upon the salary question is the *amount* of the in-

TABLE XIV

INCREASES TO ELEMENTARY TEACHERS' SALARIES GRANTED FOR 1918-19 IN THE 392 CITIES REPORTING.

(Distributed according to size of city and amount of increased received.)*

Size of Increases	Number of teachers in each size group						
	I	II	III	IV	V	VI	Totals
$ 0-$ 9.99	99	21	390	265	64	270	1109
10- 19.99					10	16	26
20- 29.99			195	277	52	48	572
30- 39.99			8	80	158	25	271
40- 49.99	178	258	270	388	342	244	1680
50- 59.99	3139	181	469	494	139	438	4860
60- 69.99		271	91	489	97	113	1061
70- 79.99	1152	135	489	386	258	109	2529
80- 89.99		155	217	20	12	28	432
90- 99.99	406	69	394	139	245	176	1429
100- 109.99	1762	637	804	868	171	256	4498
110- 119.99		39	87	51	9	12	198
120- 129.99	685	216	159	302	27	44	1433
130- 139.99		76	58	50	47	37	268
140- 149.99		118	35	64	38	9	264
150- 159.99	422	350	215	224	68	101	1380
160- 169.99			223	20	5	8	256
170- 179.99			48	48	14	8	118
180- 189.99			134	20		11	165
190- 199.99		276	44	5		1	326
200- 209.99	394	181	202	6	1	10	794
210- 219.99			15	2			17
220- 229.99			56	15	9	4	84
230- 239.99			13				13
240- 249.99	458		141				599
250- 259.99		90	22	27			139
260- 269.99			2	27			29
270- 279.99	432		9				441
280- 289.99							
290- 299.99							
300- 309.99	11			16			27
310- 319.99							
320- 329.99	79						79
330- 339.99							
340- 349.99	53						53
350- 359.99				5			5
360- 369.99							
370- 379.99	266						266
380- 389.99			1				1
390- 399.99	11						11
400- 409.99				8			8
480- 489.99							
500- 509.99							
Totals	9637	2983	4792	4299	1766	1968	25445
**Q1	$ 57	$ 71	$ 57	$ 51	$ 45	$ 45	$ 56
Median	106	106	101	74	71	59	91
Q3	127	152	156	108	98	100	123
Q	35	41	50	29	27	28	59

*For explanation of size groups see page 9.
**For explanation of terms used see pages 10 and 11.

creases given. Tables XIV-XIX, inclusive, give the distribution of the increases to teachers' salaries granted for 1918-19 in the 392 cities reporting. The distribution is made according to size and geographical groups for the cities and the amount of the increase received.

These tables show that the increases received during the present

TABLE XV

INCREASES TO INTERMEDIATE TEACHERS' SALARIES GRANTED FOR 1918-19 IN THE 392 CITIES REPORTING

(Distributed according to size of city and amount of increase received.)*

Size of Increases	Number of teachers in each size group						
	I	II	III	IV	V	VI	Totals
$ 0-$ 9.99	652	3	29	42	29	80	835
10- 19.99					7	1	8
20- 29.99				29	8	5	42
30- 39.99				4	10	2	16
40- 49.99		2		22	54	12	90
50- 59.99	2	27	14	55	31	61	190
60- 69.99		8		15	13	11	47
70- 79.99		19	9	23	52	17	120
80- 89.99		12	8	3	5	5	33
90- 99.99	79	4	18	27	57	24	209
100- 109.99		81	192	42	34	10	359
110- 119.99			4	4		3	11
120- 129.99	58			36	17	2	113
130- 139.99				7	14	16	37
140- 149.99				2	9		11
150- 159.99	40	10	31	51	7	12	151
160- 169.99			1	2		3	6
170- 179.99			3	1	1	5	10
180- 189.99			9	12	2		23
190- 199.99			7	4			11
200- 209.99		10	22	1		3	36
210- 219.99			1				1
220- 229.99			14		4	2	20
230- 239.99			5		1		6
240- 249.99			3				3
250- 259.99			4				4
260- 269.99				10		1	11
270- 279.99	122						122
280- 289.99							
290- 299.99							
300- 309.99						1	1
310- 319.99				1			1
320- 329.99				1			1
330- 339.99							
340- 349.99							
350- 359.99							
360- 369.99							
370- 379.99							
380- 389.99							
390- 399.99							
400- 409.99				10			10
480- 489.99							
500- 509.99							
Totals	953	176	374	404	355	286	2548
**Q1	$ 0	$ 72	$101	$ 51	$ 46	$ 0	$ 0
Median	0	102	106	93	75	57	74
Q3	98	107	152	130	100	98	109
Q		18	26	40	27	49	55

*For explanation of size groups see page 9.
**For explanation of terms used see pages 10 and 11.

year in these 392 cities vary from "no increase" to $400 for elementary and intermediate teachers, and to $500 for high school teachers. The increases most frequently received, as shown by the number of teachers receiving them, are "no increase," $45, $50, $75, $90, $100, $125 and $150 for elementary and intermediate teachers, and the same, but with $200 and $300 added for the high schools. These amounts are explained by the practice of giving increases of $5 and $10 per month,

TABLE XVI

INCREASES TO HIGH SCHOOL TEACHERS' SALARIES GRANTED FOR 1918-19 IN THE 392 CITIES REPORTING

(Distributed according to size of city and amount of increase received.)*

Size of Increases	Number of teachers in each size group						
	I	II	III	IV	V	VI	Totals
$ 0-$ 9.99	457	38	116	151	153	227	1142
10- 19.99						12	12
20- 29.99			4	1	7	7	19
30- 39.99			1	2	9	5	17
40- 49.99	78	92	64	141	87	67	529
50- 59.99	185	61	108	121	64	86	625
60- 69.99			4	83	11	11	109
70- 79.99	100	57	166	57	29	52	461
80- 89.99		47	25	16	11	23	122
90- 99.99	7	16	102	69	97	84	375
100- 109.99	707	168	306	375	125	98	1779
110- 119.99			5	9	10	3	27
120- 129.99	467	102	61	25	7	15	677
130- 139.99			36	11	27	30	104
140- 149.99		15	14	12	1		42
150- 159.99		105	25	101	38	29	298
160- 169.99			1	11		5	17
170- 179.99		10	9	10	12	1	42
180- 189.99			7	10		19	36
190- 199.99		27	3	6	2	4	42
200- 209.99	92	78	78	41	11	25	325
210- 219.99			1	4		4	9
220- 229.99			8	4	3	8	23
230- 239.99		1	3	1		1	16
240- 249.99			111	1		4	116
250- 259.99			12	6	1	2	21
260- 269.99			9	2			11
270- 279.99	65		6	7	1		79
280- 289.99		5	4	8		2	19
290- 299.99		2	7	1			10
300- 309.99	323		9	28		13	373
310- 319.99				4	1		5
320- 329.99			6	5			11
330- 339.99			4				4
340- 349.99			6	1			7
350- 359.99			2	2	5		9
360- 369.99			10				10
370- 379.99							
380- 389.99			7				7
390- 399.99					1		1
400- 409.99				20			20
480- 489.99			1				1
500- 509.99			2	4		2	8
Totals	2481	822	1344	1367	709	839	7562
**Q1	$ 55	$ 72	$ 72	$ 54	$ 47	$ 0	$ 53
Median	106	106	103	101	78	71	102
Q3	127	152	148	120	105	106	127
Q	36	40	38	38	29	53	37

*For explanation of size groups see page 9.
**For explanation of terms used see pages 10 and 11.

which amounts to the $45, $50, $90 and $100 increases as the term is nine or ten months in length, and by the practice of giving "lump sum" increases of $50, $75, $100, $125 and $150, etc., per year. These tables also show that the size of the city again has a direct effect, and that there is a markt tendency for the "increase" to be less in the smaller cities. It is also noticeable that the geographical groups which pay the highest salaries pay slightly higher increases, altho there are several

TABLE XVII

INCREASES TO ELEMENTARY TEACHERS' SALARIES GRANTED FOR 1918-19 IN THE 392 CITIES REPORTING

(Distributed according to geographical grouping and amount of increase received.)*

Size of increases	Number of teachers in each geographical group					
	A	B	C	D	E	Total
$ 0-$ 9.99	273	326	114	178	218	1109
10- 19.99	10			14	2	26
20- 29.99	113	54	191	166	48	572
30- 39.99	99	45	28	13	86	271
40- 49.99	263	491	287	183	456	1680
50- 59.99	1665	1763	377	794	261	4860
60- 69.99	154	441	140	180	146	1061
70- 79.99	754	606	325	71	773	2529
80- 89.99	332	30	45	6	19	432
90- 99.99	322	454	265	302	86	1429
100-109.99	1505	861	1073	599	460	4498
110-119.99	142	12	27	9	8	198
120-129.99	349	21	73	22	868	1433
130-139.99	143	33	46	29	17	268
140-149.99	110	66	66	22		264
150-159.99	672	431	260	5	12	1380
160-169.99	6	1	50	42	157	256
170-179.99	8	37	30	43		118
180-189.99	40	10	15	94	6	165
190-199.99	1	2	3	320		326
200-209.99	330	1	422	41		794
210-219.99			2	15		17
220-229.99			60	20	4	84
230-239.99				13		13
240-249.99			134	7	458	599
250-259.99		90	48	1		139
260-269.99			27	2		29
270-279.99	432		4	5		441
280-289.99						
290-299.99						
30 -309.99			16		11	27
310-319.99						
320-329.99					79	79
330-339.99						
340-349.99					53	53
350-359.99			5			5
360-369.99						
370-379.99					266	266
380-389.99			1			1
390-399.99					11	11
400-409.99			8			8
480-489.99						
500-509.99						
Totals	7723	5775	4246	3196	4505	25445
**Q1	$ 57	$ 53	$ 65	$ 53	$ 64	$ 56
Median	96	65	103	80	103	91
Q3	125	102	151	108	129	123
Q	34	25	43	28	33	59

*For explanation of geographical groups see page 9.
**For explanation of terms used see pages 10 and 11.

irregularities. A study of the median increases will show that they hover around $100—about as many teachers receive less than $100 as receive more. Exceptions to this are Groups B and D of the geographical groups; and Group I for intermediate teachers, Group IV for elementary and Groups V and VI of the size groups for all teachers. In these groups the median increases are lower than $100. The quartile deviations would indicate that the middle fifty

TABLE XVIII

INCREASES TO INTERMEDIATE TEACHERS' SALARIES GRANTED FOR 1918-19 IN THE 392 CITIES REPORTING.

(Distributed according to geographical grouping and amount of increase received.)*

Size of Increases	Number of teachers in each geographical group					
	A	B	C	D	E	Totals
$ 0-$ 9.99	80	681	24	13	37	835
10- 19.99	7			1		8
20- 29.99	16	2		24		42
30. 39.99	4			2	10	16
40- 49.99	9	30	6	25	20	90
50- 59.99	64	16	78	4	28	190
60- 69.99	15	12	8		12	47
70- 79.99	47	20	41	7	5	120
80- 89.99	8	14	11			33
90- 99.99	29	93	12	36	39	209
100-109.99	100	3	180	12	64	359
110-119.99	1		6	3	1	11
120-129.99	13		12	63	25	113
130-139.99	4	14		7	12	37
140-149.99			9	1	1	11
150-159.99	126	4	15	1	5	151
160-169.99		1		4	1	6
170-179.99	3	4		3		10
180-189.99	2	12		9		23
190-199.99		4		7		11
200-209.99	11		17	8		36
210-219.99				1		1
220-229.99	1		2	15	2	20
230-239.99				5	1	6
240-249.99				3		3
250-159.99			4			4
260-269.99			10		1	11
270-279.99	122					122
280-289.99						
290-299.99						
300-309.99				1		1
310-319.99			1			1
320-329.99			1			1
330-339.99						
340-349.99						
350-359.99						
360-369.99						
370-379.99						
380-389.99						
390-399.99						
400-409.99			10			10
**480-489.99						
500-509.99						
Totals	662	910	457	255	264	2549
**Q1	$ 58	$ 0	$ 68	$ 50	$ 50	$ 0
Median	105	0	103	90	95	74
Q3	158	21	109	100	100	109
Q	50		21	25	25	55

*For explanation of geographical groups see page 9.
**For explanation of terms used see pages 10 and 11.

per cent are easily included between $50 and $150. The median increases for the groups—$91 for elementary, $74 for intermediate and $102 for high school teachers for the year 1918-19 are rather condemning evidence, that in a great majority of the cases, the increases were given without regard to the needs of the teachers. During 1918 the cost of living advanst 25% [1] and remained nearly

1 "Monthly Review"—Bureau of Labor Statistics—January 1919—page 100.

TABLE XIX

INCREASES TO HIGH SCHOOL TEACHERS' SALARIES GRANTED FOR 1918-19 IN THE 392 CITIES REPORTING.

(Distributed according to geographica' grouping and amount of increase received.)*

Size of Increases	Number of teachers in each geographical group					
	A	B	C	D	E	Totals
$ 0-$ 9.99	235	519	172	93	123	1142
10- 19.99				12		12
20- 29.99	8	2	1	4	4	19
30- 39.99	1	2	4	1	9	17
40- 49.99	49	174	105	190	11	529
50- 59.99	273	44	62	182	64	625
60- 69.99	24	23	4	26	32	109
70- 79.99	152	13	44	62	190	461
80- 89.99	57	9	18	9	29	122
90- 99.99	93	37	95	98	52	375
100-109.99	638	379	415	49	298	1779
110-119.99	8	8	5		6	27
120-129.99	128	5	20	242	282	677
130-139.99	17	12	18	43	14	104
140-149.99	10	4	6	21	1	42
150-159.99	151	6	109	9	23	298
160-169.99	4	3	5	4	1	17
170-179.99	13	4	18	2	5	42
180-189.99	9	10	10	2	5	36
190-199.99	1	3	6	29	3	42
200-209.99	107	7	115	5	91	325
210-219.99	2	4	1		2	9
220-229.99	9	2	8	3	1	23
230-239.99		10	2	3	1	16
240-249.99	32	1	77	5	1	116
250-259.99	2	4	9	6		21
260-269.99	5	1	1	4		11
270-279.99	66	6	4	3		79
280-289.99		4	6	9		19
290-299.99	2		1	7		10
300-309.99	33	2	32	5	301	373
310-319.99		4		1		5
320-329.99	1	5	1	4		11
330-339.99				4		4
340-349.99	2		1	4		7
350-359-99		5	4			9
360-369.99	1		9			10
370-379.99						
380-389.99	7					7
390-399.99	1					1
400-409.99		3	17			20
480-489.99			1			1
500-509.99		4	2		2	8
Totals	2141	1319	1410	1141	1551	7562
**Q1	$ 58	$ 0	$ 71	$ 49	$ 78	$53
Median	104	48	105	81	109	102
Q3	129	104	158	129	201	127
Q	36	52	44	40	67	37

*For explanation of geographical groups see page 9.
**For explanation of terms used see pages 10 and 11.

stationary during the remainder of the school year. More demands were made upon teachers' time and resources, and yet more than half of them received less than $100 increase for the year.

One of the effects of the war on teaching was the pronounst shortage of teachers. This was as responsible as any other one element for calling the attention of educators to the "Emergency in Education." To find, if possible, the effect of low salaries on teachers leaving was

TABLE XX

SUMMARY TABLE OF THE NUMBER OF TEACHERS WITHDRAWING FROM EACH SALARY LEVEL DURING THE YEAR 1918-19 IN THE 392 SCHOOL SYSTEMS REPORTING

(Schoo' systems are arranged according to the size of the cities.)*

Salary Groups	I.	II	III	IV	V	VI	Totals
$200- 249							
250- 299							
300- 349	1		1		20	1	23
350- 399	1					3	4
400- 449			3		4	4	11
450- 499	4	1	10	16	21	4	56
500- 549		5	5	20	27	6	63
550- 599	5	2	7	19	25	31	69
600- 649	7	2	12	44	46	24	135
650- 699	26	4	14	46	43	28	161
700- 749	21	7	36	44	44	32	184
750- 799	96	5	31	30	23	12	197
800- 849	24	6	38	32	21	33	154
850- 899	20	7	21	34	14	34	130
900 949	3	5	37	39	29	25	138
950- 999	14	9	19	14	7	3	66
1000-1049	12	7	25	12	14	9	79
1050-1099	17	1	32	11	2	6	69
1100-1149	9	3	26	8	5	10	61
1150-1199	13	2	13	9	1	3	41
1200-1249	4	6	20	11	3	2	46
1250-1299	14	2	4	3	1	1	25
1300-1349	2	2	9	13	3	6	35
1350-1399	11		4	3	2	3	23
1400-1449	2	4	5	5		1	17
1450-1499	3		1	2	3	2	11
1500-1599	8	1	3	6	3	6	27
1600-1699	5	2	10	5			22
1700-1799	6	1	1	3			11
1800-1899	2		2	2	1		7
1900-1999	2	2	1				5
2000-2099							
2100 2199							
2200-2299	1						1
2300-2399							
2400-2499					1		1
2500-2999							
3000-up							
Totals	333	86	390	432	363	289	1892
**Q1	$ 760	$ 755	$ 765	$ 660	$ 573	$ 647	$ 679
Median	811	940	923	851	695	817	808
Q3	1096	1011	1129	1123	846	908	1010

* For explanation of size groups see page 9.
**For explanation of terms used see pages 10 and 11.

the reason for asking the last two questions of Part I of the questionnaire to superintendents. Only 288 superintendents of the 392 replied to these questions, but the replies are evenly distributed thru the groups so that the returns are quite truly representative of the cities involved in the study.

Tables XX and XXII show that the salaries of teachers withdrawing during the year spread over nearly as wide a range as was found for the distribution of the salaries received. This indicates that teachers were drawn from all salary levels, which has two probable implications; one, that there was need for teachers of more ability, which would draw the better paid ones, and the second implication, that even the better paid salaries in teaching were still too low to hold

TABLE XXI

SUMMARY TABLE OF THE NUMBER OF TEACHERS WITHDRAWING FROM EACH SALARY LEVEL IN ORDER TO ENTER SOME OTHER FIELD OF WORK DURING THE YEAR 1918-19 IN THE 392 SCHOOL SYSTEMS REPORTING.

(School systems are arranged according to the size of the cities.)*

Salary Groups	I	II	III	IV	V	VI	Total
$ 200- 249							
250- 299							
300- 349	1				14		15
350- 399	1					2	3
400- 449			2		2		4
450- 499	2	1	4	11	11	1	30
500- 549		4		9	11	5	29
550- 599	2	2	1	6	6	18	35
600- 649	4	5	3	14	13	16	55
650- 699	7	4	3	20	9	13	56
700- 749	10	4	11	16	13	20	74
750- 799	80	1	13	12	5	7	118
800- 849	6	2	15	13	12	14	62
850- 899	5	4	6	17	4	14	50
900- 949		2	13	13	10	8	46
950- 999	3	5	3	7	1		19
1000-1049	6	1	5	3	7	4	26
1050-1099	9		10	4	1	3	27
1100-1149	3	1	8	5	1	3	21
1150-1199	8		4	4		1	17
1200-1249		1	6	6	2		15
1250-1299	6	1	2	2	1	1	13
1300-1349			1	7	1	2	11
1350-1399	1		3	1	1	1	7
1400-1449	1		5	2		1	9
1450-1499	2		1		2	2	7
1500-1599	1		2	3	1	1	8
1600-1699	1		6	4			11
1700-1799	2	1		2			5
1800-1899	1						1
1900-1999	2	1	1				4
2000-2099				1			1
2100-2199							
2200-2299							
2300-2399							
2400-2499							
2500-2999							
3000-up							
Totals	164	40	128	182	128	137	779
**Q	$ 759	$ 630	$ 781	$ 664	$ 523	$ 626	$ 671
Median	785	750	927	812	689	734	788
Q3	1017	960	1144	989	850	874	1910

*For explanation of size groups see page 9.
**For explanation of terms used see pages 10 and 11.

people of markt ability under the keener competition which developt during the period of the war. Tables XXI and XXIII show the importance of the second cause mentioned, since 41 per cent of the teachers who withdrew from any school system during the year did so to enter some other field of work. It will be noticed in all of these distributions of teachers withdrawing that the medians are lower than the corresponding medians for the same groups in Tables IV and VIII, which give the distribution of salaries for all teachers for the same year.

The best direct measure of the effect of low salaries on teachers withdrawing which can be obtained from the data assembled would be to know how many of the teachers withdrawing were from the

TABLE XXII

SUMMARY TABLE OF THE NUMBER OF TEACHERS WITHDRAWING FROM EACH SALARY LEVEL DURING THE YEAR 1918-19 IN THE 392 SCHOOL SYSTEMS REPORTING.

(School systems are arranged according to geographical groupings.)*

Salary Groups	A	B	C	D	E	Total
$ 200- 249						
250- 299						
300- 349	5	18				23
350- 399	1	3				4
400- 449	4	5		2		11
450- 499	10	29	15	2		56
500- 549	30	18	14	1		63
550- 599	31	25	25	8		89
600- 649	66	27	31	7	4	135
650- 699	53	48	26	20	14	161
600- 749	63	22	42	18	39	184
750- 799	38	91	39	15	14	197
800- 849	48	13	18	44	31	154
850- 899	30	11	39	30	20	130
900- 949	45	5	33	26	29	138
950- 999	22	5	8	11	20	66
1000-1049	37	5	10	13	14	79
1050-1099	13	8	18	3	27	69
1100-1149	24	2	9	5	21	61
1150-1199	8	6	6	2	19	41
1200-1249	14	5	11	4	12	46
1250-1299	8	3	3		11	25
1300-1349	12	5	9	1	8	35
1350-1399	3	3	4		13	23
1400-1449	3		8	2	4	17
1450-1499	3		3		5	11
1500-1599	5	1	2	1	18	27
1600-1699	5		1	3	13	22
1700-1799	4		1		6	11
1800-1899	2		2		3	7
1900-1999	1		3		1	5
2000-2099						
2100-2199						
2200-2299					1	1
2300-2399						
2400-2499	1					1
2500-2999						
3000-up						
Total	589	358	380	218	347	1892
**Q1	$ 649	$ 583	$ 669	$ 740	$ 825	$ 679
Median	787	714	797	841	1009	808
Q3	978	970	919	932	1234	1010

*For explanation of geographical groups see page 9.
**For explanation of terms used see pages 10 and 11.

poorer paid half of the teachers, in other words, from the teachers receiving below the median salary in the different groups. Tables XXIV and XXV give these data for the size groups and the geographical groups. It will be noticed in every group, whether for size or location, that 50 per cent or more of the teachers withdrawing received less than the median salary for the group, with an average of 66% for all teachers studied. In other words, two out of each three teachers who left teaching during this year received less than the median salary of $917. When the percentages are computed for those who left teaching in order to enter some other line of work they run in the majority of cases a little higher than the figures above, with a

TABLE XXIII

SUMMARY TABLE OF THE NUMBER OF TEACHERS WITHDRAWING FROM EACH SALARY LEVEL IN ORDER TO ENTER SOME OTHER FIELD OF WORK DURING THE YEAR 1918-19 IN THE 392 SCHOOL SYSTEMS REPORTING.

(School systems are arranged according to geographical grouping)*

Salary Groups	A	B	C	D	E	Total
$ 200- 249						
250- 299						
300- 349	3	12				15
350- 399		3				3
400- 449		4				4
450- 499	5	18	7			30
500- 549	13	11	5			29
550- 599	16	10	5	4		35
600- 649	22	14	14	3	2	55
650- 699	15	17	11	8	5	56
700- 749	25	10	17	9	13	74
750- 799	11	80	19	4	4	118
800- 849	22	6	12	15	7	62
850- 899	11	5	11	14	9	50
900- 949	9	2	11	13	11	46
950- 999	10	4	1		4	19
1000-1049	11	4	2	4	5	26
1050-1099	6	3	9	1	8	27
1100-1149	3	2	5	4	7	21
1150-1199	2	5	1	1	8	17
1200-1249	4	3	1	2	5	15
1250-1299	4	3	2		4	13
1300-1349	1	5	2		3	11
1350-1399		1	3		3	7
1400-1449	2		4	1	2	9
1450-1499	1		2		4	7
1500-1599	1	1		1	5	8
1600-1699	3		1	1	6	11
1700-1799	2		1		2	5
1800-1899			1			1
1900-1999	1		3			4
2000-2099	1					1
2100-2199						
2200-2299						
2300-2399						
2400-2499						
2500-2999						
3000-up						
Total	204	223	150	85	117	779
**Q1	$ 632	$ 559	$ 680	$ 735	$ 838	$ 671
Median	714	758	793	848	1035	788
Q3	955	793	903	926	1248	1019

*For explanation of geographical groups see page 19.
**For explanation of terms used see pages 10 and 11.

percentage for the total of 70%. This is rather conclusive evidence that the lack of adequate financial reward was one of the principal reasons for teachers leaving the profession. This question will be further discust in connection with the cost of living and teachers' salaries. The fact that the salaries of teachers are not high enough to offer anything of a career to ambitious men and women is undoubtedly one reason why teaching was one of the first occupations to suffer a threatening shortage under the increast demands for trained intelligence incident to the war.

PART II OF QUESTIONNAIRE TO SUPERINTENDENTS

The primary purpose of asking the questions contained in Part II of the questionnaire to superintendents for elementary, intermediate

TABLE XXIV

"TEACHERS LEAVING" AND "TEACHERS LEAVING FOR OTHER FIELDS OF WORK" DURING 1918-19 COMPARED WITH THE MEDIAN SALARY OF EACH SIZE GROUP OF CITIES FOR ALL TEACHERS (ELEMENTARY, INTERMEDIATE AND HIGH SCHOOL).*

Size Groups	I	II	III	IV	V	VI	Total
No. of teacher in each group.	17461	4667	7744	6812	3446	3545	43675
Median salary of all teachers in each group.....	$1013	$943	$ 28	$814	$750	$741	$917
No. of teachers leaving each group during 1918-19**	333	86	390	432	363	289	1892
Median salary of teachers leaving during 1918.....	$811	$940	$923	$795	$695	$817	$808
No. of teachers leaving each group during 1918-19 to enter other work.....	164	40	128	182	128	137	779
Median salary of teachers entering other work during 1918-19.....	$785	$750	$-27	$812	$689	$734	$788
Per cent of teachers leaving who received less than median salary of group.....	67%	50%	51%	57%	63%	44%	66%
Per cent of teachers entering ther work who received less than median salary of group	75%	72%	51%	54%	61%	56%	70%

*For explanation of size groups see page 9.
**These figures include only the returns from the 288 cities answering this question.

TABLE XXV

"TEACHERS LEAVING" AND "TEACHERS LEAVING FOR OTHER FIELDS OF WORK" DURING 1918-19 COMPARED WITH THE MEDIAN SALARY OF EACH GEOGRAPHICAL GROUP OF CITIES FOR ALL TEACHERS (ELEMENTARY, INTERMEDIATE AND HIGH SCHOOL*).

Geograaphical Groups	A	B	C	D	E	Total
No. of teachers in each group....	12947	8825	6959	7801	7143	43675
Median salary for all teachers in each group.....	$869	$794	$871	$1015	$1187	$917
No. of teachers leaving each group during 1918-19**.	559	358	380	218	347	1892
Median salary of teachers leaving during 1918-19.....	$787	$714	$797	$841	$1009	$808
No. of teachers leaving each group during 1918-19 to enter other work.....	204	223	150	85	117	779
Median salary of teachers entering other work during 1918-19.....	$714	$758	$792	$848	$1035	$788
Per cent of teachers leaving who received less than median salary of group.....	61%	77%	60%	86%	66%	66%
Per cent of teachers entering other work who received less than median salary of group.....	66%	76%	63%	84%	69%	70%

*For explanation of geographical groups see page 9.
**These figures nclude only the returns from the 288 cities answering this question.

and high schools was to find the present condition of salary schedules for teachers in the cities of the United States, to find the living expenses as far as they could be judged by the one item of "board and room," and also to find the professional requirements demanded of teachers for election in the different school systems. The questions were askt in duplicate for each of the three divisions; Set A for elementary schools, Set B for intermediate schools, and Set C for high schools, in order to adjust the blank to superintendents who had to report on one or more of these divisions, as well as to provide for an easy method of making distinctions between any two divisions. The

TABLE XXVI

NUMBER OF MONTHS IN THE SCHOOL YEAR OF 1918-19 FOR ELEMENTARY SCHOOLS IN 386 CITIES REPORTING

(Distributed according to number of months and size of city.)*

Length of year in months	Number of cities in each size group.						
	I	II	III	IV	V	VI	Total
10	14	17	18	35	23[1]	49	156
9½	1	2	11[2]	14	10	9	47
9	2	7	13	38[3]	43[4]	68[3]	171
8½					3	3	6
8				1	1	3	5
7½					1		1
Totals	17	26	42	88	81	132	386
% having 10 months	82	65	43	40	28	37	40
% having 9½ months	6	8	26	16	12	7	12
% having 9 months	12	27	31	43	53	52	44
% having less than 9	0	0	0	1	6	5	3

* For explanation of size groups see page 9.

[1] One city reported 11 months.

[2] One city reported 9¾ months.

[3] One city reported 9¼ months.

[4] Three cities reported 9¼ months.

Note:—Number of months reported for Intermediate Schools and High Schools were in almost all cases identical with the above.

questions have been tabulated separately, except Questions 1, 6 and 7, where the answers were practically uniform for the different divisions.

Each question as it pertains to the different divisions will be discust in order thru the remainder of this chapter.

Question 1.—"How many months are these schools in session?"

Table XXVI shows the number of months in the school year for the different cities. It is very gratifying to note that 40 per cent of the schools reporting remain in session for ten months, and that 52 per cent of the schools remain in session for longer than nine months. The percentage of schools reporting ten months of school decreases very rapidly as the size of the cities decreases, so that where we find 82% for cities in Group I it is as low as 28% in cities of Group V. On the other hand, the percentages of cities having nine months of school increases as the size of the cities decreases, so that 12 per cent of the cities in Class I increases to 53 per cent in Group V. The 3 per cent of all the 386 cities reporting less than nine months of school is a further source of gratification. It is evident from this table that the length of school year is rapidly approaching ten months as a standard. State Superintendent W. F. Bond of Mississippi, states that "There is a tendency to put all such teachers on a twelve months' salary basis, giving them 30 days off during the year, and employing them for half time during the rest of the time the school is not in session to coach all those students that fail to pass the last session of work." On the other hand, some of the states are just passing laws making six months the minimum length of term, so that there is yet room for material

rovement in this respect thruout the country.

TABLE XXVII
NUMBER OF CITIES HAVING ESTABLISHT SALARY SCHEDULES FOR ELEMENTARY TEACHERS IN THE 365 CITIES REPORTING
(Distributed according to size of cit es.)*

	Number of cities in each size group						
	I	I	III	IV	V	VI	Total
Have establisht salary schedule	19	14[1]	35	69[2]	43[3]	57[4]	237
Have a "partial" salary schedule					1	3	4
Have no establisht schedule		2	4	18	33[5]	67[6]	124
Totals	19	6	39	87	77	127	365
% having an established schedule	100%	88%	90%	79%	56%	45%	65%

* For explanation of size groups see page 9.
[1] One city reports its schedule as "obsolete".
[2] Two cities report their schedules as "obsolete".
[3] Two cities report their schedules as "obsolete", one as "subject to change" and one as "going into effect for 1919-20."
[4] Four cities report their schedules as "obsolete," two as "the state minimum" one as the "State law + 25%," and one as "State law + 10%."
[5] One city reports "irregular increase—no schedule."

TABLE XXVIII
NUMBER OF CITIES HAVING ESTABLISHT SALARY SCHEDULES FOR INTERMEDIATE TEACHERS IN THE 184 CITIES REPORTING
(Distributed according to size of cities.)*

	Number of cities in each size group						
	I	II	III	IV	V	VI	Total
Have an establisht salary schedule	10	6	12	27	27	30	112
Have a "partial" salary schedule							
Have no establisht salary schedule		1	4	12	24	31	72
Totals	10	7	16	39	51	61	184
% having establisht schedule	100%	86%	75%	78%	53%	49%	61%

*For explanation of size groups see page 9.

Question 2.—"Do you have an establisht salary schedule for elementary school teachers?"

Tables XXVII, XXVIII and XXIX give the answers to this question from 365 of the superintendents who answered it. It will be observed that 65 per cent of the cities have schedules for elementary teachers, 61 per cent for intermediate, and 47 per cent for high school, which would seem to indicate a tendency to establish schedules for elementary teachers, more than for teachers in the other two divisions. In these tables it is obvious that the size of the city is a large determining factor in whether or not they have establisht schedules. *All* the cities of Group I have schedules in all three divisions, and the percentage of cities having establisht schedules decreases rather uniformly as the size of the city decreases. This is most noticeable in the lack of schedules for high school teachers in cities of Groups V and VI. Cities in Group IV, which includes those having between

TABLE XXIX

NUMBER OF CITIES HAVING ESTABLISHT SALARY SCHEDULES FOR HIGH SCHOOL TEACHERS IN THE 337 CITIES REPORTING

(Distributed according to size of cities.)*

	Number of cities in each size group.						
	I	II	III	IV	V	VI	Total
Have an establisht salary schedule....	18	11	31	38	28	31	157
Have a "partial" salary schedule....							
Have no establisht salary schedule....		5	8	42	43	82	180
Totals...	18	16	39	80	71	113	337
% having establisht schedule.....	100%	69%	80%	48%	39%	38	47%

*For explanation of size groups see page 9.

TABLE XXX

MINIMAL SALARIES FOR ELEMENTARY TEACHERS IN 352 CITIES REPORTING

(Distributed according to salary received and size of cities.)*

Minimal salary	Number of cities in each size group.						
	I	II	III	IV	V	VI	Totals
$250-$ 299			[2]		[2]		3
300- 349	[1]						1
350- 399		[2]	1		3	2	8
400- 449	[1]		2	1	2	2	8
450- 499		3	3	[9]	15	16	46
500- 549		3	3	15	9	10	40
550- 599	[2]	1	4	14	14	19	54
600- 649	2	2	8	13	[13]	21	59
650- 699	1	3	5	8	5	10	32
700- 749	4	1	[8]	7	8	13	41
750- 799	3	1	1	4	2	5	16
800- 849	3	1	3	2	3	4	16
850- 899	1		3	2		5	11
900- 949	1	1	2	7	1	[3]	15
950- 999				1			1
1000-1049							
1050-1099							
1100-1149							
1150-1199						1	1
Totals	19	18	44	83	77	111	352
Median	$ 731	$ 600	$ 650	$ 610	$ 570	$ 613	$ 614
% below 800	74%	89%	82%	86%	95%	89%	88%
% below 500	11%	28%	16%	12%	29%	18%	19%

*For explanation of size groups see page 9.

[1] For no experience; [2] colored; [3] 2 year apprentice; [4] with experience; [5] and bonus; [6] all paid same salary.

10,000 and 25,000 population, have almost as large a percentage with salary schedules as the groups of larger cities. The big drop in percentage between Groups IV and V would seem to indicate that cities below 10,000 population have not yet found it as expedient to establish salary schedules as the larger cities. Competition for teachers, regardless of any set salary schedule, and particularly of a schedule of low salaries, is, in a great many cases, the determining factor in the election of teachers in the smaller cities. This will probably continue until a more adequate adjustment of salaries can be made between cities of

TABLE XXXI
MINIMAL SALARIES FOR INTERMEDIATE TEACHERS IN 169 CITIES REPORTING
(Distributed according to salary received and size of cities.)*

Minimal Salary	Number of cities in each size group						
	I	II	III	IV	V	VI	Total
$ 250- 299					1		1
300- 349	1				1		2
350- 399			1				1
400- 449			1				1
450- 499			1	2	4	6	13
500- 549				3	10	1	14
550- 599				2	4	2	8
600- 649			2	2	3	12	19
650- 699	1	2	1	2	6	4	16
700- 749	1	1	2[1]	4	10	9	27
750- 799	2		2	1	4	2	11
800- 849	2		3	6	2	5	18
850- 899		2	2	4		4	12
900- 949			3	3	3	2	11
950- 999	2			3	1		6
1000-1049		1		1		1	3
1050-1099				1		1	2
1100-1149			2[2]	1			3
1150-1199						1	1
Totals	9	6	20	35	49	50	169
Median	$ 788	$ 800	$ 800	$ 813	$ 663	$ 700	$ 718
% below 800	55%	50%	50%	46%	88%	72%	67%
% below 500	11%	0%	15%	6%	12%	12%	11%

* For explanation of size groups see page 9.
[1] Women; [2] Men.

different sizes, adjusting the salary to the difference in the cost of living and the opportunities for advancement afforded.

A number of the superintendents in answering Question 2 made note of the fact that salary schedules represent changeable standards, and that they were conscious of the fact that schedules establisht several years ago are at the present time "obsolete." A number also stated that revisions of schedules were under consideration at the present time, so that it is quite likely that the working schedules for 1919-20 will be materially higher than for the present year.

Question 3.—"What is the minimal salary for elementary teachers?"

Tables XXX, XXXI and XXXII give the distribution of the answers to this question for elementary, intermediate and high school teachers. In the establishment of the minimal salaries, it is noticeable that the size of the city does not have the effect that it has had on most of the other facts considered. Especially is this true in the elementary and intermediate sections. The range of minimal salaries is, as would be expected, much less than the range of salaries for the respective groups. There is, however, a very wide variation in this respect, since some cities have minimal salaries of $250 for elementary teachers, while one of the cities reporting started its teachers at $1,150. The range is as great for intermediate teachers, and is $150 more for high school teachers. This item is very noticeable when it is possible for a beginning high school teacher to enter one school system at $450 a

TABLE XXXII
MINIMAL SALARIES FOR HIGH SCHOOL TEACHERS IN 333 CITIES REPORTING.
(Distributed according to salary received and size of cities.)*

Minimal Salary	Number of cities in each size group						
	I	II	III	IV	V	VI	Totals
$ 450-$499			1				1
500- 549			1		1	1	3
550- 599					1	2	3
600- 649	c 1		1	a 3	3	8	16
650- 699	a 1	a 1	2	5	8	6	23
700- 749	d 2	a 2	1	a 10	12	19	46
750- 799	a 1	aa 2	a 6	11	a 10	10	40
800- 849	1	1	b 5	13	ab 14	13	47
850- 899		b 1	a 4	1	8	14	28
900- 949	1	a 3	7	aaaa 14	7	9	41
950- 999			4	b 2	2	3	11
1000-1049	aabd 8	bb 5	b 4	bb 7		5	29
1050-1099	1	b 1					2
1100-1149	2	b 2	2	b 3	1	1	11
1150-1199			1				1
1200-1249	ab 5	1	b 2	4	b 3	3	18
1250-1299	b 1			1			2
1300-1349	b 1		3	2			6
1350-1399						1	1
1400-1499		1					1
1450-1499							
1500-1599	b 1			b 1	1		3
Totals	26	20	44	77	71	95	333
Median	$1038	$975	$921	$837	$802	$806	$837
% below 1000	27%	50%	73%	76%	93%	90%	78%
% below 800	19%	25%	27%	38%	49%	48%	40%

*For explanation of size groups see page 9.
a. women; *b*. men; *c*. colored; *d* girls' high school.
Letters are repeated as many times as there are cities to which the condition refers.

year, while the same teacher would receive $1,500, should she start work in another city. When we consider the percentage of cities with minimal salaries below $500, we find 19 per cent for elementary teachers and 11 per cent for intermediate teachers. About one in every five cities with salary schedules starts its teachers at *less than* $500 per year. This is equivalent to only $41 per month on the twelve month basis, or $1.39 per living day. When these figures are compared with the wages paid workers in any other occupations, the oft-quoted expression "A starvation wage for beginners" takes on a real meaning. In the light of the campaign to establish $1,000 and even $1,200 as the minimal salary for every American teacher, the 88 per cent of cities who have a minimal salary for elementary teachers below $800 shows the urgency of the salary situation in the cities of this country. Only one of the 352 cities reporting minimal salaries for elementary

teachers pays a minimum of over $1,000, less than three-fourths of one per cent. The situation is very little better for intermediate teachers. The better salaries paid to high school teachers is evidenst in the minimal salaries establisht, as well as in all other tabulations. The additional preparation amounting to more than two years in most cases, received some recognition when we realize that 40 per cent of the cities report minimal salaries for high school teachers, of less than $800, compared to the 88 per cent reporting minimal salaries for elementary teachers below that figure. Seventy-eight per cent of the minimal salaries for high school teachers is below $1,000, which is the lowest proposed minimum for all teachers. Over three-fourths, then, of the high schools fall short of this standard. A study of these tables makes evident one of the reasons why capable young men and young women do not choose to enter the teaching profession, and furnishes an argument of weight for the establishment of a minimal salary, high enough to offer inducements nearer than ten years in the future.

Question 4.—"What is the maximum for elementary teachers?"

Fewer superintendents, as will be shown by the totals in Tables XXXIII, XXXIV and XXXV gave maximal salaries for teachers in

TABLE XXXIII
MAXIMAL SALARIES FOR ELEMENTARY TEACHERS IN 334 CITIES REPORTING
(Distributed according to salary received and size of cities.)*

Maximal Salary	Number of cities in each size group						
	I	II	III	IV	V	VI	Totals
$ 400-$449					[1]1		1
450- 499					1	1	2
500- 549					1	3	4
550- 599				1	3		4
600- 649			2	4	5	7	18
650- 699		1		8	5	15	29
700- 749			1	10	9	13	33
750- 799				4	10	17	31
800- 849	[1]1		6	9	12	10	38
850- 899	2		3	7	4	5	21
900- 949	3	3	6	12	9	7	40
950- 999	1		3	7	3	1	15
1000-1049	3	5	3	6	3	8	28
1050-1099		3	6	2	1	4	16
1100-1149	1		3	5	2	4	15
1150-1199	1		2	1		1	5
1200-1249	2	3	3	2	1	1	12
1250-1299		1	2	2		1	6
1300-1349	3		1	1			5
1350-1399	1			1		1	3
1400-1449				1			1
1450-1499	1						1
1500-1599	2		1	1			4
1600-1699		1					1
1700-1799							
1800-1899				1			1
Totals	21	17	42	85	70	99	334
Median	$1125	$1045	$1000	$ 896	$ 800	$ 781	$ 867
% below 1000	33%	24%	50%	73%	90%	78%	71%
% below 800	0%	6%	7%	32%	50%	57%	37%

*For explanation of size groups see page 9.
[1]Colored.

TABLE XXXIV
MAXIMAL SALARIES FOR INTERMEDIATE TEACHERS IN 161 CITIES REPORTING
(Distributed according to salary received and size of cities.)*

Maximal Salary	Number of cities in each size group						
	I	II	III	IV	V	VI	Totals
$400-$449					[1]		1
450- 499							
500- 549					1		1
550- 599							
600- 649			1		4	1	6
650- 699				4	3	3	10
700- 749			1	4	3	5	13
750- 799				1	3	8	12
800- 849				1	8	11	20
850 899			1	1	4	1	7
900- 949		1		3	8	1	13
950- 999	1		1	1	1		4
1000-1049				3	3	3	9
1050-1099		1	1	4	1	2	9
1100-1149	1		[1]	2	4	3	11
1150-1199		1	1	1		1	4
1200-1249	1	1	3	2	1	2	10
1250-1299		1	2			1	4
1300-1349	2	2	2	1	1		8
1350-1399	1			1		1	3
1400-1449			1	1			2
1450-1499	1						1
1500-1599	1		[3]	2	1		7
1600-1699	1		1	1			3
1700-1799			[2]				1
1800-1899			[2]				1
2300				1			1
Totals	9	7	21	34	47	43	161
Median	$1338	$1225	$1263	$1033	$ 856	$ 820	$ 933
% below 1000	11%	14%	19%	44%	77%	70%	54%
% below 800	0%	0%	10%	26%	32%	40%	27%

*For explanation of size groups see page 18.
[1] Women; [2] Men; [3] Colored.

the different divisions. This can be taken as a fairly safe indication that there is a more pronounst tendency to establish minimal salaries than maximal. The maximal salaries for elementary teachers show a condition almost as deplorable as that revealed in the tabulations for minimal salaries. The median maximal salaries for the 334 cities reporting such salaries is only $867. This means that in half of the cities in the country, as represented by these 334, a teacher in the elementary grade cannot look forward to a salary of more than $867 per year, no matter how good her work or how long her experience. Thirty-seven per cent of these cities report a maximum below $800, while 71 per cent report *maximal* salaries below $1,000, the lower of the proposed *minimal* salaries for all teachers. Practically three-fourths of the cities have maximal salaries at the present time below this proposed minimum. The conditions are slightly better for the intermediate teachers as they were also found to be in the study of the minimal salaries. But, even with these more successful and better prepared teachers, 27 per cent of the cities set maximal salaries below $800, and 54 per cent below $1,000. The maximal salaries for high school teachers are considerably higher than those for either the ele-

TABLE XXXV

MAXIMAL SALARIES FOR HIGH SCHOOL TEACHERS IN 326 CITIES REPORTING.

(Distributed according to salary received and size of cities.)*

Maximal Salary	Number of cities in each size group						
	I	II	III	IV	V	VI	Total
$ 650- 699						1	1
700- 749						1	1
750- 799						1	1
800- 849			1	1	3	1	6
850- 899	c			a	1	4	5
900- 949	1		1	3	7	18	30
950- 999				2	4	9	15
			a	a			
1000-1049			1	3	6	6	16
			a				
1050-1099			2	1		7	10
			aa	a			
1100-1149			3	2	9	8	22
	a			a			
1150-1199	1			2	4	1	8
	d				a		
1200-1249	1	1	3	7	5	5	22
					a	a	
1250-1299		1	1	3	3	3	11
			aa	a			
1300-1349		1	3	4	1	3	12
	a	aa					
1350-1399	2	2	2	2	4	4	16
		a	b	aa			
1400-1449	1	2	2	5	3	1	14
1450-1499				2			2
		a		aag	b	b	
1500-1599	2	1	6	15	9	7	40
	b		aab	b	b		
1600-1699	3	3	13	8	2	4	33
		b	b	b			
1700-1799	2	2	2	9	2		17
	aae	b	bb	cbbfg			
1800-1899	6	1	3	6	1	2	19
		b		b			
1900-1999		1	1	1	1		4
	b	b		bh			
2000-2099	3	2	2	3			10
		a					
2100-2199		1					1
	b						
2200-2299	1			1			2
		b					
2300-2399		1		1			2
2400-2499	1						1
			b				
2500-2599		1	2				3
2700-2799	1						1
3000-3099	1						1
Total	26	20	48	81	65	86	326
Median	$1800	$1666	$1583	$1523	$1181	$1078	$1358
% below 1500	23%	35%	40%	46%	77%	85%	59%
% below 1000	4%	0%	4%	7%	23%	41%	15%

*For explanation of size groups see page 9.

a. women; *b*. men; *c*. colored; *d*. girls' high school; *e*. boys' high school; *f*. college graduates; *g*. single men; *h*. married men.

Letters are repeated as many times as there are cities to which the condition refers.

mentary or intermediate, and are spread over a much wider range. The median maximum for high school teachers is $1,358, while 15 per cent of the cities set the high school maximum below $1,000, forty-two per cent below $1,200, and 59 per cent below $1,500. In all three divisions it is noticeable that the size of the city has a decided effect upon the maximal salary set, since the median salary diminishes regularly with the decrease in city size.

When we consider the very low entering wage for high school

TABLE XXXVI
ANNUAL INCREASE GRANTED TO ELEMENTARY TEACHERS
IN 333 CITIES REPORTING
Distributed according to increases granted as reported by city superintendent and size of the cities)*

Annual Increase where stated as a definite amount	Number of cities in each size group						
	I	II	III	IV	V	VI	Total
$ 18				1		1	2
20						1	1
22½			1	2	2	5	10
25			5	6	2	4	17
30				2	1		3
35						1	1
40	1		3		1		5
45	1	2	1	10	12	12	38
47½	1	1		3	2	1	8
50	6	5	11	22	12	21	77
60	1		6	1		1	9
62½				1			1
75	1	1		1	1		4
85						1	1
90				1	1	1	3
100	2		1	1	2	2	8
120			1				1
150					1		1
175						1	1
No definite increase.....		1		5	12	29	47
Varying and combination increases (a).....	5	6	8	26	23	27	95
Total	18	16	37	82	72	108	333

*For explanation of the size groups see page 9.
(a) In this group ten cities reported increases of $22.50–$45; seven cities reported $25–$50; five cities $45–$90; eight cities $50–$100; four cities $10%; and sixty-four other cities reported various increases such as $25–$29, on $45 every 2 years etc.

teachers in connection with the time spent in meeting the preparation requirements for high school teachers and the present day cost of such an education, there is a little wonder that more competent teachers do not enter the high school field when the median maximal salary for half of the cities is below $1,358. This lack of financial incentive to continuance in the teaching profession is felt in all three divisions. It is one of the lines of reform along which much progress must be made within the next few years in order to maintain even the present standard of efficiency in our schools, to say nothing of an increast efficiency which the enlarged demands upon the school of the present critical period of reconstruction have made.

Question 5.—"What is the annual increase for elementary teachers?"

The answers to this question for elementary, intermediate and high schools are given in Tables XXXVI, XXXVII, and XXXVIII. The returns as they were given on the superintendents' blanks showed wide variation. An attempt was made to group them into as few groups as possible, but in each division there remained a relatively large group of increases in varying combinations, too numerous to tabulate. Some typical instances are given in the foot notes on each table. Of the annual increases as distributed for the elementary teachers in Table

TABLE XXXVII

ANNUAL INCREASE GRANTED TO INTERMEDIATE TEACHERS IN 154 CITIES REPORTING

(Distributed according to increases granted as reported by city superintendents and size of the cities.)*

Annual Increase where stated as a definite amount	Number of cities in each size group						
	I	II	III	IV	V	VI	Total
$ 22½						3	3
25				2	1		3
36					1		1
40					1		1
45				4	11	7	22
47½					1		1
50	2	4	5	7	5	10	33
60			2	1			3
62½				1			1
67½					1		1
72					1		1
75				1	1	1	3
80						1	1
90				1	3	2	6
100	2		2	3	2		9
180					1		1
185						1	1
No definite increase		1	1	4	8	14	28
Varying and combination increases (a)	4	2	6	11	7	5	35
Total	8	7	16	35	44	44	154

*For explanation of size groups see page 9.
(a) In this group seven cities reported increases of $50–$100, while the remaining twenty-eight cities reported various increases such as $45–$90, $38 first year, $64 the second, $25, $50, $75, etc.

XXXVI, we find 47 of the 333 cities with no definite increase, and of the 193 cities reporting fixt increases, we find 164 or 85 per cent giving an annual increase of $50 or less. This percentage becomes 70% for the intermediate teachers and 54% for high school teachers. These figures, compared with the returns from the actual increases given, as shown in Tables XIV-XIX inclusive of Part I from the same questionnaire, will show that by far the most common increase given to the teachers is $50, or less. Should these figures include the cities providing for no increase, the percentages would run very much higher. An increase such as $22.50, $25, $45 or $50 indicates clearly, as was shown also in the above tables of Part I, that these increases have been given according to custom, rather than in any attempt to adjust the teacher's salary to living conditions of the past year. Only a very few superintendents in their replies indicated the existence of any flexibility in the matter of the annual increase. The fact, however, that four superintendents definitely stated that the annual increase was a matter of early adjustment offers a ray of hope.

Question 6—"On what conditions does the granting of this increase depend?"

Table XXXIX gives a summary of the 309 answers to this ques-

TABLE XXXVIII

ANNUAL INCREASE GRANTED TO HIGH SCHOOL TEACHERS IN 301 CITIES REPORTING

(Distributed according to increases granted as reported by city superintendents and size of the cities.)*

Annual increase where stated as a definite amount	Number of cities in each size group.						
	I	II	III	IV	V	VI	Total
$ 25						1	1
33⅓			1				1
35			1				1
36					1		1
45		1	2	8	6	12	29
47½					2		2
50			6	14	11	12	43
60	1		4	2			7
62½				1			1
75				1		2	3
80						1	1
90	1		1	3	4	2	11
100	11	2	5	12	5	5	40
120			1				1
185						1	1
202		1					1
No definite increase		1	3	16	17	36	73
Varying and combination increases (a)	6	10	13	18	17	20	84
Total	19	15	37	75	63	92	301

*For explanation of size groups see page 9.

(a) In this group twenty cities reported increases of $50-$100; eleven cities $45-$90; nine cities $25 50, 75, while the other forty-four cities reported various increases such as $50 under $900, $10 up. $50+5%+$100 bonus, etc.

TABLE XXXIX

CONDITIONS DETERMINING THE GRANTING OF INCREASES IN SALARIES IN 309 CITIES REPORTING.

(Distributed according to the conditions given by city superintendents and size of the cities.)*

Condition	Number of cities in each size group.							
	I	II	III	IV	V	VI	Total	% of group
1. "Success," "Merit," "Efficiency," "Satisfaction"	1	4	10	26	28	25	94	30%
2. Length of Service	11	3	11	21	17	19	82	27%
3. "Success or Efficiency and Length of Service"	4	3	9	11	4	22	53	17%
4. "Training," "Education," "Self-improvement" (a)		3	3	7	10	8	31	7%
5. Recommendation of Supt., Board, Committee, or a combination of these.	1		2	4	3	8	18	6%
6. "None," "Irregular"				3		6	9	3%
7. "Market Conditions," "Competition," "Scarcity"				1		5	6	2%
8. "Cost of Living"				1	1	2	4	1%
9. Other Conditions (b)			4	2	2	4	12	4%
Total	17	13	39	76	65	99	309	

*For explanation of size groups see page 9.
(a) In all cases except five this is in combination with either "tenure" or "success"
(b) Including such answers as "Attitude," "Professional Zeal," "Funds Available," "Class of Certificate."

tion. There were almost as many wordings to this answer as there were superintendents answering the question. Certain groups of related conditions, however, were combined, making the set of nine given in the table. By far the largest percentage of answers give as the determining condition the idea of success, or length of service, or a combination of these two. In reality, 74 per cent of the answers are included within the first three groups. This indicates that three out of four school systems have a more or less automatic method of granting increases to teachers, since the conditions set forth in Group 1 amount to little more than length of service because of their indefinite nature, and the inaccuracy of any present methods for determining the degree of "success," "merit," "efficiency," and "satisfaction." It is significant that only 7 per cent of the replies included in any way the element of training, education, or self-improvement. The 6 per cent listed under Group 5 probably belong in one of the first three groups. A separate division was made in order to separate those answers where definite mention was made of a recommending authority. The irregularity of the answers to Question 6 is not as evident from the form in which the table is put. Of the 309 answers, there were at least 150 different wordings for the conditions named. These were reduced to 40 on the first tabulation, and then combined into the present 9. This table will help to show the need for a greater standardization in respect to the granting of increases, and clearly shows the existence of one of the most difficult problems in the making and the administering of an efficient salary schedule, a schedule which will not only protect the teachers who are in service, but which will offer constant incentive to progress.

Question 7—"What does good board and a comfortable room cost an elementary school teacher in your community?" (12 months).

In determining some adequate measure of teachers' expenses, "board and room" was decided upon as the figure most easily obtained, and most reliably usable. As a single figure it represents the biggest item of a teacher's expense for the year, and also probably reflects the cost of living in a particular community as well as any other single measure. The question was put on the basis of 12 months, because teachers have to live thru that period each year, and teaching cannot be made a definite profession nor real progress made in the matter of salaries until teachers' salaries and expenses are computed on the basis of twelve months rather than nine. Table XL gives the cost of "board and room" for 12 months for elementary teachers in 360 cities reporting, and by means of the footnotes covers the answers for intermediate and high school teachers as well. There is considerable irregularity in the median costs of "board and room" in the different

TABLE XL

COST OF "BOARD AND ROOM" FOR TWELVE MONTHS FOR ELEMENTARY TEACHERS IN 360 CITIES REPORTING.

(Distributed according to amount paid for board and room and size of city)*

Cost of Board & Room for twelve months	Number of cities in each size group.						
	I	II	III	IV	V	VI	Total
$ 50- $99				1			1
100- 149							
150- 199					1	1	2
200- 249					1	2	3
				l	*v*		
250- 299			1	1	1	4	7
			g	*gk*	*g*	*gb*	
300- 349			2	2	5	17	26
			f	*hhi*	*itx*	*hsicC*	
350- 399	1	1	7	23	25	40	97
			c	*oqr*	*urw*	*yc*	
400- 449	2	1	10	20	21	30	84
	b			*ne*		*ud*	
450- 499	5	3	5	14	10	20	57
	a		*de*	*mp*	*e*		
500- 549	5	6	9	16	10	7	53
550- 599		1		1	1	4	7
				j		*pA*	
600- 649	1	1	1	5	3	4	15
650- 699			1				1
700- 749	1		1	2			4
				s			
750- 799	1			1		1	3
Total	16	13	37	86	78	130	360
Q1	$460	$471	$395	$388	$383	$361	$376
Median	500	513	433	440	414	402	426
Q3	540	540	515	511	483	459	494

* For explanation of size groups see page 9.

Notes show single cases where superintendents quote higher board and room for intermediate or high school teachers than for elementary teachers.

a. Elem. $416-$520; Inter. $460-$520; H.S. $520
b. H.S. $540.
c. H.S. $480.
d. H.S. $572.
e. H.S. $520 up.
f. Inter. and H.S. $450-$500.
g. H.S. $364.
h. H.S. $416.
i. H.S. $400.
j. H.S. $800.
k. H.S. $300-$420.
l. H.S. $312-$364.
m. Inter. & H.S. $600.
n. H.S. $468-$624.
o. Elem. $300-$400; H.S. $360-$425.
p. H.S. $500-$720.
q. Int. $400-$450; H.S. $450.
r. H.S. 420-$500.
s. H.S. $775.
t. Elem. $312-$364; H.S. $364 up.
u. H.S. $416-$520.
v. Elem. $270; Inter. $312-$364. H.S. $312-$520.
w. Elem. $416; Inter. $416-$442; H.S. $442.
x. H.S. $350-$400.
y. H.S. $400-$600.
z. H.S. $364-$468.
A. Elem. $480-$600; H.S. $600 up.
B. Elem. $336; Inter. $360; H.S. $364.
C. Elem. $360; Inter. $360-$420; H.S. $420

size groups. The effect of the size of the city is as pronounst as in any other items of the study, thru the comparison of the median $500 for "board and room" in cities of Group I, with the $402 in cities of Group VI, shows as great a difference as existed in the median salaries for those groups. The quartile deviation for the different groups is surprisingly uniform considering the prevalence of the belief that it costs very much more to live in the larger cities. A great many of the answers were made in terms of multiples of 52, since "board and room" in most places is figured at so much per week. The grouping of these returns into intervals of $50 will but slightly distort the figures, since

the groups will about as often vary one way as the other from the figure actually reported. The unusual number of footnotes to this table is a means of calling attention to a condition which has been allowed to exist, and which in many cases is taken for granted as necessary, namely, that high school teachers, and in a number of cases intermediate teachers, pay more for "board and room" than elementary teachers. Twenty-nine superintendents in answering Question 7 for the intermediate and high school teachers put a higher figure for the high school teachers than for the elementary teachers. The footnotes show the different recognitions. A tabulation of the difference given here brings a median recognized difference of $68 in the year's cost for "board and room." Two of the differences are as high as $250. This is but an implied acceptance of a financial, educational and social difference, which in many communities has been assumed to exist between teachers in the grades and the high school. The fostering of such a distinction cannot help but work against the professionalizing of teaching, and yet this social difference is financially forced on elementary teachers in a majority of cities by the very much lower salaries paid to them, in comparison with teachers in the high school. A satisfactory adjustment to this condition cannot be had until elementary teachers are as well prepared for their work as high school teachers and receive equal salaries.

Additional light will be thrown upon the adequacy and inadequacy of the minimal and maximal salaries establisht in the salary schedules of these cities by comparing the establisht salaries with the cost of living as it is indicated by the cost of "board and room" within each particular city. In order that this may be done it is necessary to determine what percentage of a teacher's annual expenses are included in "board and room." This cannot be done without a careful analysis of teachers' budgets, and the consequent study of the necessary expenses for teachers as compared with the expenses of workers in other fields. In this study it is advocated that "board and room" should not require more than 50 per cent of a teacher's salary, basing this principle upon the results of the following studies or budgets.

Robert Coit Chapin,[1] in his "Standard of Living Among Workingmen's Families in New York City," publisht in 1909, establisht certain percentages spent for housing and food by certain income groups. between $400 and $500 to 53 per cent for families with incomes between $1,500 and $1,600. These percentages were for families averaging five members and for New York City, where the percentage spent for rent, particularly, would be higher than in most other cities. They were also for families where the expenses of professional upkeep

[1] "Standards of Living Among Workingmen's Families in New York City," Russell Sage Foundation—page 70.

TABLE XLI

AVERAGE PERCENTAGE OF SALARY SPENT FOR VARIOUS ITEMS AND AVERAGE ANNUAL SALARY OF WORKERS IN THE SHIPBUILDING DISTRICTS OF THE UNITED STATES 1918.[1]

	New England and Eastern[2]	Southern[3]	Great Lakes[4]	Pacific Coast[5]	Total
Number of familes studied	1232	838	1210	918	4198
Clothing for men	8.0%	7.4%	7.8%	7.5%	7.7%
Clothing for women	7.4%	6.8%	6.9%	7.6%	7.1%
Total for clothing	15.4%	14.2%	14.7%	15.1%	14.8%
Furniture and furnishings	4.0%	4.1%	4.4%	4.1%	4.2%
Food	43.8%	44.4%	41.6%	38.6%	42.2%
Housing	12.0%	11.3%	14.2%	13.8%	12.9%
Fuel and light	5.2%	4.4%	5.0%	4.1%	4.7%
Miscellaneous	19.6%	21.6%	20.1%	24.3%	21.2%
Total	100.0%	100.0%	100.0%	100.0%	
Average annual salary	$1407.00	$1334.00	$1460.00	$1422 00	$1411.00

[1] From Monthly Review, Bureau of Labor Statistics for the months of March, June, August, September, and October, 1918.

The cities included in each group, with the number of families included in each, are as follows:

[2] Bath, Me. (99), Portland, Me. (103), Boston, Mass. (210), Portsmouth, Mass. (104), Buffalo, N. Y. (204), Philadelphia, Pa. (512)

[3] Mobile, Ala. (100), Jacksonville, Fla. (57), Pensacola, Fla. (65), Tampa, Fla. (51), Slidell, La. (50), Baltimore, Md. (205), Beaumont, Tex. (50), Houston, Tex. (91), Newport News, Va. (72), Norfolk, Va. (97). Cities with less than 50 families studied were not used in these figures, nor the earnings of colored workers where given separately.

[4] Chicago, Ill. (215), Detroit, Mich. (256), Cleveland, Ohio (203), Lorain, Ohio (109), Toledo, Ohio (207), Manitowac, Wis. (111), Superior, Wis. (109).

[5] Los Angeles, Cal. (157), San Francisco, Cal. (286), Portland, Ore. (164), Seattle, Wash. (208), Tacoma, Wash. (103).

and educational advancement were much lower than for the ordinary teacher.

The Railroad Wage Commission,[1] in its report of April 30, 1918, found that for 265 families studied, the amounts spent for rent, fuel, light, furniture and food varied from 80 per cent in families with incomes less than $600 to 67 per cent for families with incomes between $1,000 and $2,000. These were the figures for 1917 and are consequently higher for these items than would be found in normal times, due to the unprecedented increase in the cost of these items during that year.

In a study by the Bureau of Labor Statistics[2] of the percentage of salaries spent for various items by workers in the ship-building district of the United States for 1918, it was found that the average amounts spent for furniture and furnishings, food, housing, fuel and light amounted to 64 per cent. Table XLI gives these percentages for four ship-building districts of the United States. The 64 per cent will again be influenst by the fact that the study included only workers with families, and also by the same conditions as were true in the Chapin and Railroad Wage studies, that the "miscellaneous" expenses are necessarily smaller under these conditions than would be true for a teacher.

[1] From the Report of the Railroad Wage Commission, April 30, 1918—page 93.

[2] Ship-building from the Monthly Review of the Bureau of Labor Statistics for the months of March, June, August, September and October, 1918.

Bruere in "Increasing Home Efficiency"[1] analyzes the budgets of some 14 teachers with incomes mostly above $1,000, and finds that the average percentage spent for food and shelter by these teachers is only 33.3 per cent. This is materially lower than any of the other precentages, due to the higher salaries of the teachers studied and the fewer people dependent upon the income.

Gibbs in "The Minimum Cost of Living,"[2] a study of families of limited income in New York City, gives as the ideal division for incomes between $800 and $1,000, rent 20 per cent and food 30 per cent.

The Consumers' League[3] of New York City, in a study of the budgets of working girls in New York State, found that the necessary distribution of expenses for an income of $780 involved the expenditure of 49 per cent for "board and room."

Miss Helen Louise Johnson, Editor of the *General Federation Magazine,* the official organ of the "Federation of Women's Clubs of America," and national authority on Household Budgets, when askt what percentage of a teacher's expenses "board and room" should be, said: "It should not be more than 50 per cent, and it would insure better teachers and a more efficient citizenship if it were only 40 per cent instead of 50."

At the request of Professor B. R. Andrews, Assistant Professor of Household Arts of Teachers College, the following estimates of the "board and room" cost for teachers was made by Mrs. Alice P. Norton, Editor of the *Journal of Home Economics:*

"BOARD AND ROOM"

Income	*Per cent*
$1,800	42
1,200	50
900	57
780	59

The State Teachers' Association of Michigan,[4] in a study of teachers' salaries computed tables which were based upon the assumption that "board and room, laundry and carfare" for twelve months would constitute not more than 55 per cent of a teacher's necessary expenses.

An examination of the teachers' budgets of the women teachers of Columbus, Nebraska,[5] corroborates this figure by giving the median annual expenditures for women teachers in the elementary schools for

[1] Bruere, "Increasing Home Efficiency"—page 316. Macmillan.
[2] "Minimum Cost of Living," by Winifred Stuart Gibbs—page 13. Macmillan.
[3] Pamphlet of The Consumers' League of New York City for January, 1919, entitled "Is This Living?"
[4] Teachers' Salaries in Michigan by the Michigan State Teachers' Association—page 6.
[5] Annual Report of the Superintendent of City Schools, Columbus, Nebraska—page 25.

"board and room" at 54.6 per cent, and for high school teachers 52.6 per cent.

A similiar study of the living expenses of 250 teachers in Tulsa, Oklahoma,[1] gives a median expenditure of 49 per cent for these two items.

If with increast salaries there is going to be a proportional increase in the amount of preparation demanded, and in the amount spent for professional advancement during teaching, the per cent of the salary spent for "board and room" must constantly decrease rather than increase. Making an allowance for the fact that in the above studies and estimates many of them are for families, and under conditions not demanding as heavy expenditure for "advancement," it seems entirely fair to advocate that the average amount spent by a teacher for "board and room" should not exceed 50 per cent of her income. As the budgets of individual teachers will probably show with present salaries and expenses, more than 50 per cent of the salary will be spent for "board and room." Theoretically, it should be less than 50 per cent, since the expenses other than "board and room," such as clothing, books, magazines, medical service, travel, charity, professional advancement, etc., should require 50 per cent or more of a teacher's salary. Moreover, the above items do not include provision for insurance, savings or investments, which a teacher has a legitimate right to enjoy as well as the responsibility of providing for. The total necessary expenses for elementary teachers were computed from the cost of "board and room" as given by the superintendents in their answers to Question 7. These total expenses (found by doubling the price of the cost of "board and room") were then transferred into percentages of the minimal and maximal salaries offered in the same cities. Tables XLII and XLIII show the distribution of these percentages with the minimal and maximal salaries. It is noticeable that when the total expenses found in this way are referred to the minimal salaries that the median percentages of those salaries spent is 137.5 per cent. In other words, the total expenses of teachers on this basis in half of the cities exceed 137.5 per cent of the minimal salary offered. It is noticeable that 6 per cent of the cities have total expenses on this basis exceeding 200 per cent of the minimal salary, and that 97 per cent of the cities expect teachers to start at a minimal salary which would demand the expenditure of more than 100 per cent of that salary for necessary expenses.

The condition is better relative to the maximal salaries, but even here as shown in Table XLIII, the median amount of the maximal

[1] "Expenses of Teachers in Tulsa, Oklahoma"—National Education Association Leaflet.

TABLE XLII

INADEQUACY OF MINIMAL SALARIES OFFERED IN 326 CITIES REPORTING AS SHOWN BY THE PERCENTAGES OF THE MINIMAL SALARIES REQUIRED FOR THE "TOTAL NECESSARY EXPENSES"[1] OF ELEMENTARY TEACHERS IN THE SEVERAL CITIES.

(Distributed according to minimal salary and percentage required.)

Minimal Salaries	Percentages required for "Total Necessary Expenses"																					Total
	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	225	250	275	300	325	
$ 250- 299												1											1
300- 349											1		1				1	1		1	1	1	6
350- 399					1			2	1	1	2	1	1										7
400- 449								3	1	8	5	6	5	3	2	2	3	1					44
450- 499				1				2		14	6	9	2	3	6	4		1					48
500- 549			2	1			4	6	13	7	4	9	3	6			1	1	1				58
550- 599							1	8	5	5	5	2	2	1	2	1							32
600- 649						1	6	11	4	7	4	2		1	1								37
650- 699						1	1	2	6	3	1		1										15
700- 749							4	3	1	3	4			1									16
750- 799					1			3	2	1													9
800- 849					1	2	4	1	3	2	1		1										13
850- 899									1			1											2
900- 949										1													1
950- 999																							
1000-1049																							
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1700-1799																							
1800-1899																							
1900-1999																							
2000-2099																							
2100-2199																							
2200-2299																							
2300-2399																							
2400-2499																							
2500-2999																							
3000-and over.																							
Total			2	2	3	4	20	41	55	48	41	30	27	21	9	5	11	3	1	1	1	1	326

[1] "Total Necessary Expenses" computed by considering "board and room" as 50%.

TABLE XLIII

INADEQUACY OF MAXIMAL SALARIES OFFERED IN 326 CITIES REPORTING AS SHOWN BY THE PERCENTAGES OF THE MAXIMAL SALARIES REQUIRED FOR THE "TOTAL NECESSARY EXPENSES"[1] OF ELEMENTARY TEACHERS IN THE SEVERAL CITIES.

(Distributed according to maximal salary and percentage required.)

Maximal Salaries	Percentages required for "Total Necessary Expenses"																					Total
	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	225	250	275	300	325	
$ 300- 349																							
350- 399																							
400- 449																							
450- 499						1																	1
500- 549						1	1	2															4
550- 599									2		1			1									4
600- 649						2	1	9	2	1	1	2											18
650- 699		1			1	2	12	4	1	2	1	1		1									26
700- 749				1	4	5	5	12	3	2	1												33
750- 799			1	1	1	7	6	3	4	2		3	1										29
800- 849	1			2	10	10	5	4		3													35
850- 899		1	1	1	3	5	3	2			1												17
900- 949		1	2	1	10	7	6	9	2				1										39
950- 999				2	6	4	6																18
1000-1049				6	4	8	7		2			1											28
1050-1099			1		3	8		1															13
1100-1149			1	2	2	3	3			1													12
1150-1199					2	1		1															4
1200-1249			2	1	2	4	2	1															12
1250-1299			1	3		1																	5
1300-1349			1	1		1		1															4
1350-1399				1				1															2
1400-1449				1																			1
1450-1499				1																			1
1500-1599	1	1				1																	3
1600-1699																							
1700-1799																							
1800-1899		1																					1
1900-1999																							
2000-2099																							
2100-2199																							
2200-2299																							
2300-2399																							
2400-2499																							
2500-2999																							
3000-and over.																							
Total	2	5	10	24	48	71	57	50	16	11	5	7	2	2									310

[1] "Total Necessary Expenses" computed by considering "Board and Room" as 50%

salary which would be spent is 99.3 per cent. The teachers in 48 per cent of these cities, according to this standard, are compelled to spend more than 100 per cent of the maximal salary offered. This means that the chances are about even in the 310 cities reporting maximal salaries for elementary teachers, that when, after years of service, this maximum is reacht, it will still be inadequate to meet the living expenses in that city. It will be notist in Tables XLII and XLIII that there is a distinct negative correlation[1] between the minimal and maximal salary granted and the total expenses of the teachers as found by counting the cost of "board and room" as 50 per cent of those expenses, (a correlation of practically minus .5 in both cases).[2] This means that the higher the minimal or maximal salary the smaller the per cent of salary is spent for necessary expenses and the lower the salaries set the larger the percentage spent for living expenses. These figures show the utter inadequacy of salary schedules based upon traditional salaries, and the urgent necessity for establishing minimal and maximal salaries which will provide for an adequate living under conditions prevailing in any particular locality. Not until this is done and some provision made, not only to meet all living expenses, but some slight saving, can we hope to have a permanent improvement in the quality of teachers nor in the amount of professional advancement during service.

Question 8.—"Is teaching experience a prerequisite to election in your elementary schools?"—"How much?"

Tables XLIV, XLV and XLVI give the answers to this question for elementary, intermediate and high schools. Fewer superintendents answered this question, as will be shown by the total in each table, and considerable variation existed in the replies. Where definite amounts of experience were required it will be seen that by far the largest number of cities demand one or two years' experience as a prerequisite to election. For elementary schools 37 per cent of the cities replying definitely state one year as a prerequisite, and 39 per cent definitely give two years as a requirement, making a total of 76 per cent demanding either one or two years of experience. For intermediate schools 30 per cent demand one year, 42 per cent two years, a total of 72 per cent, while for high schools, 35 per cent of the cities demand one year, and 38 per cent two years, a total of 73 per cent. The demand is rather constant thru the three divisions with the exception that there is a slight increase in the number of cities demanding three years of experience for high school teachers. Relatively few of the cities specify that normal training will serve as a substitute for

[1] For explanation of term see page 164, Appendix III.
[2] Found by method explained on page 164-5, Appendix III.

TABLE XLIV

NUMBER OF YEARS OF TEACHING EXPERIENCE REQUIRED AS A PREREQUISITE TO ELECTION IN THE ELEMENTARY SCHOOLS OF 205 CITIES REPORTING.

(Distributed according to amount of experience required and size of the cities.)*

Experience required in years	Number of cities in each size group.						
	I	II	III	IV	V	VI	Total
0			1		1	2	4
½					1		1
1	2	4	11	14	16	29	76
2	7	1	11	19	16	26	80
3		1		2	1	2	6
4				1			1
1 to 2				3	2	2	7
1 to 3				1			1
2 to 5	1						1
Normal training and graduation		3		1	1	1	6
Normal training + 1 or 2 years' experience		1	1	1			3
Normal training or 1 or 2 years' experience				1			1
"Probation," "Apprentice," or "Cadet"		2		1			3
"Some" experience required				2		4	6
"No definite rule"					1	6	7
Other requirements	1				1		2
Total	11	12	24	46	40	72	205

*For explanation of size groups see page 9.

TABLE XLV

NUMBER OF YEARS OF TEACHING EXPERIENCE REQUIRED AS A PREREQUISITE TO ELECTION IN THE INTERMEDIATE SCHOOLS OF 120 CITIES REPORTING.

(Distributed according to amount of experience required and size of the cities.)*

Experience required in years	Number of cities in each size group.						
	I	II	III	IV	V	VI	Total
0					1		1
1		1	6	5	10	14	36
2	5	2	6	12	11	15	51
3		2		4	3	3	12
4				1			1
5					1		1
2 to 3				1			1
2 to 6					1		1
3 to 4			1	1			2
Normal training and graduation	1	1			1		3
"Some" experience required							
"No definite rule"				1	3	4	8
"Experience preferred"	1			1			2
Other requirements		1					1
Total	7	7	13	26	31	36	120

*For explanation of size groups see page 9.

experience. These totals show the prevalence of the custom, too firmly fixt by school men, of demanding experience before election to city systems. This automatically makes the rural school and the poorer districts the "training schools" for city teachers.

Question 9.—"State the number of years in academic and professional preparation above the 8th grade which is a prerequisite to election in your school?"

TABLE XLVI

NUMBER OF YEARS OF TEACHING EXPERIENCE REQUIRED AS A PREREQUISITE TO ELECTION IN THE HIGH SCHOOLS OF 170 CITIES REPORTING.

(Distributed according to amount of experience required and size of the cities.)*

Experience required in years	Number of cities in each size group.						
	I	II	III	IV	V	VI	Total
0					1		1
1	2	4	10	12	13	19	60
2	6	5	13	15	14	11	64
3	3			6	2	3	14
4							
5							
6			1				1
1 to 2		1		1	2	5	9
2 to 7				1			1
3 to 4			1	1			2
"No definite rule"				4	4	7	15
"Apprentice for 2 years"		1					1
Normal training and graduation						1	1
"Judgment of superintendent"					1		1
Total	11	11	25	40	37	46	170

*For explanation of size groups see page 9.

Tables XLVII, XLVIII and XLIX give the answers to this question, and are particularly interesting because of the uniformity of these requirements. The median number of years for elementary and intermediate schools is six years, representing as it does a completion of

TABLE XLVII

NUMBER OF YEARS IN ACADEMIC AND PROFESSIONAL PREPARATION ABOVE THE EIGHTH GRADE WHICH IS PREREQUISITE TO ELECTION IN THE ELEMENTARY SCHOOLS OF 338 CITIES REPORTING.

(Distributed according to amount of preparation and size of the cities.)*

Years of preparation beyond the 8th grade	Number of cities in each size group.						
	I	II	III	IV	V	VI	Total
0	1			1	5	8	15
1						1	1
2			2	2	3	6	13
3					1	3	4
4		1	4	9	19	21	54
5			4	9	3	18	34
6	16	11	26	52	33	53	191
7				1		1	2
8		1		1		1	3
9							
**4 to 6				2	3	2	7
**6 to 8	2		3	3	2	3	13
** Indefinite and varied requirements (a).		1					1
Total	19	14	39	80	69	117	338
Median number of years	6.53	6.50	6.31	6.32	6.03	5.95	6.25
% requiring less than 4 years	0%	0%	6%	4%	14%	16%	10%
% requiring 6 years	94%	85%	72%	69%	52%	47%	60%
% requiring 8 or more years	0%	8%	0%	1%	0%	1%	1%

*For explanation of size groups see page 9.
**Not included in percentages.
(a). In twenty of the cases listed under specific years the superintendents place limiting conditions ch as "6 years or 5 years and 3 years' experience," "6 years—prefer two more," "4 years—6 weeks of professional work desired," etc. In practically all cases the changes indicate an increase in existing standards.

TABLE XLVIII

NUMBER OF YEARS IN ACADEMIC AND PROFESSIONAL PREPARATION ABOVE THE EIGHTH GRADE WHICH IS PREREQUISITE TO ELECTION IN THE INTERMEDIATE SCHOOLS OF 167 CITIES REPORTING.

(Distributed according to amount of preparation and size of the cities.)*

Years of preparation beyond the 8th grade	Number of cities in each size group.						
	I	II	III	IV	V	VI	Total
0							0
1						1	1
2					4	4	8
3					1	1	2
4				2	5	4	11
5			1	2	2	2	7
6	5	6	12	21	23	30	97
7			2	1			3
8	1		1	4	1	5	12
9	1			1			2
**4 to 6					1		1
**6 to 8	1		1	5	1	2	10
**Indefinite and varied requirements[1]	1	1			6	5	13
Total	9	7	17	36	44	54	167
Median number of years	6.70	6.50	6.58	6.55	6.26	6.38	6.44
% requiring less than 4 years	0%	0%	0%	0%	14%	13%	8%
% requiring 6 years	71%	100%	75%	68%	64%	64%	67%
% requiring 8 or more years	29%	0%	6%	16%	3%	10%	10%

*For explanation of size groups see page 9.
**Not included in percentages.
[1]Fifteen superintendents put limiting conditions upon the number of years specified "plus professional training," "plus special work," "with a first grade certificate," but in all cases the added conditions show an increase in the existing standard.

TABLE XLIX

NUMBER OF YEARS IN ACADEMIC AND PROFESSIONAL PREPARATION ABOVE THE EIGHTH GRADE WHICH IS PREREQUISITE TO ELECTION IN THE HIGH SCHOOLS OF 327 CITIES REPORTING.

(Distributed according to amount of preparation and size of the cities.)*

Years of preparation beyond the 8th grade	Number of cities in each size group.						
	I	II	III	IV	V	VI	Total
0	1						1
1						1	1
2						3	3
3						1	1
4			1	1	10	3	15
5					1		1
6			1	3	1	12	17
7			1	2	3		6
8	16	10	34	60	53	82	255
9	1	1	1	5	1	3	12
**4 to 6							
**6 to 8		2			2	5	9
**Indefinite and varied requirements[1]							
Total	18	13	38	73	72	113	327
Median number of years	8.53	8.55	8.47	8.49	8.37	8.40	8.43
% requiring less than 6 years	6%		3%	1%	16%	8%	7%
% requiring 8 years	89%	91%	89%	85%	77%	80%	82%
% requiring 9 years	6%	9%	3%	7%	1%	3%	4%

*For explanation of size groups see page 9.
**Not included in the percentages.
[1]Twenty-two superintendents put limiting conditions upon the number of years specified, such as "6 years but two-thirds of the teachers must be college graduates," "or more." Six cities specify less preparation required for "commercial and non-academic subjects." In all other cases the conditions are an increase over existing standards.

high school and at last a two years' normal training course. The standard for high schools is easily seen to be eight years or the completion of four or more years of college. In these tables, particularly for the elementary schools, the effect of the size of the city is again noticeable, since there is a regular decrease in the percentage of cities requiring six years or more of training as the size of the city decreases. These tables show that for cities at least, we have quite definite standards of preparation, with a tendency for elementary and intermediate schools to increase above six years beyond the 8th grade, and for high school teachers to add a 5th year to college work.

CONCLUSIONS

The following conclusions and generalizations seem warranted from the data presented in this chapter. There will be notable exceptions in most cases, which, however, will not seriously affect their validity.

Part I of Questionnaire to Superintendents

1. Salaries Paid—1918-19:
   - (a) Elementary salaries are too low, even in the cities, for efficient work and proper living conditions for an individual teacher, and entirely inadequate for the support of families.
   - (b) There is wide variation in the salaries paid between cities of different sizes—the larger the city the larger median salary.
   - (c) There is wide variation between salaries paid in different sections of the United States, the best salaries being paid in the far western states, and the lowest salaries in the southern section.
   - (d) There is a wider variation than that in either (b) or (c) between salaries paid within any group, and in the larger cities within the city itself.
   - (e) The median salaries show a slight improvement over conditions of last year as shown by the National Education Association study; but the improvement is not at all in proportion to the increast cost of living.
   - (f) Intermediate teachers are paid about $100 more per year than elementary teachers, and high school teachers are paid nearly $300 more.
   - (g) Salaries paid in New York City, Newark, and several other of the larger cities are much higher than those for the country at large.
2. Increases Granted to Teachers—1918-19:
   - (a) The median increase for elementary teachers, $74, is much too low to provide for the increast cost of living, or to provide for better preparation and more efficient service.
   - (b) Increases are generally given on the basis of $5 or $10 a month.
   - (c) The increases were not given to those most in need of them, since "new teachers" in a great many school systems were the only ones who did not receive increases. The tendency to give increases more

often to teachers receiving below the median salary is so slight as to be negligible.

(d) Relatively few cities give increases graduated in proportion to the service rendered or additional preparation secured.

(e) The two popular methods for granting increases are first, "flat sum" of so much a month or so much a year, and second, a percentage of the present salary received. The first gives the teachers receiving the lower salaries a higher percentage of increase, while the second gives the teachers receiving the highest salaries the largest increase.

3. Teachers Leaving—1918-19:

(a) The number of teachers leaving the different school systems, in comparison with the number leaving to enter some other field of work, indicates that the shortage of teachers brought about keener competition between cities for the better teachers.

(b) Since 66 per cent or more of the teachers leaving during the year were receiving less than the median salaries of the groups in which they were teaching, it is evident that the lack of salary was an item causing these teachers either to change to some other system or to some other line of work.

PART II OF QUESTIONNAIRE TO SUPERINTENDENTS

1. Number of Months in School Year:

(a) Forty per cent of the schools reporting have 10 months or more of school, which would indicate a distinct tendency thruout the country toward 10 months as a standard term.

(b) The larger the city, the longer the term of school.

2. Cities Having Establisht Salary Schedules:

(a) There is more tendency to establish salary schedules for elementary teachers than for intermediate, and more for intermediate than for high school.

(b) The larger the city the more apt it is to have establisht schedules.

3. Minimal Salaries for Teachers—1918-19:

(a) The larger the city the larger the minimal salary.

(b) Minimal salaries are too low in practically all cities, since 88 per cent of the cities reporting offer minimal salaries below $800. Enough cities have establisht minimal salaries of $1,000 or more, however, to show that the National Education Association's proposal for this as a minimum for all teachers is entirely possible.

(c) Minimal salaries for intermediate schools and high schools are subject to the same limitations as for elementary schools. They are slightly higher in each case, but no more than the additional preparation required should demand.

4. Maximal Salaries—1918-19:

(a) Maximal salaries vary also in direct relation to the size of the city.

(b) They are entirely inadequate in most cities. Seventy-one per cent of the elementary maximal salaries, 54 per cent of intermediate salaries and 15 per cent of the high school salaries are below $1,000. This, as an ultimate goal towards which to strive, is much too low to act as an incentive or to secure the kind of teachers that America needs.

5. Annual Increases Granted According to Salary Schedule:
   (a) Annual increases as provided for in schedules are entirely insufficient. Eighty-five per cent of the regular increases provided for elementary teachers are $50 or below.
   (b) Increases are not given in relation to cost of living conditions.
   (c) Increases do not vary according to the size of the cities as much as other elements.

6. Conditions Determining Granting of Increases:
   (a) Most of the increases are given as a result of continuation in service. Tenure and adjudged success are conditions governing the granting of increases in 75 per cent of the cities.
   (b) Practically no recognition is given to educational preparation or continued training.

7. Expenses as Shown by Cost of "Board and Room":
   (a) There is a slight decrease in a teacher's total expenses as size of the city decreases, but it is not in proportion to the decrease in salary.
   (b) On the basis of "board and room" being 50 per cent of a teacher's total necessary expenses, these expenses are shown to be out of all proportion to the minimal and maximal salaries establisht in most of the cities. On this basis, practically half of the teachers would be compelled to spend more than the maximal salary obtainable under existing schedules. This indicates that teachers deny themselves books, clothing, professional advancement and other expenses which would increase their teaching efficiency could they afford them.
   (c) A number of places indicate the fact by giving higher cost of "board and room," that intermediate and high school teachers are expected to live on a higher financial standard than elementary teachers.

8. Number of Years of Teaching Experience Required as a Prerequisite:
   (a) A larger proportion of the cities in Groups I, II and III demand one or two years of teaching experience as a prerequisite to election than in the smaller groups.
   (b) There is a decided tendency for cities to demand previous teaching experience.
   (c) Very few cities allow professional training obtained in normal schools and other institutions to substitute for experience. As a consequence, the rural schools and smaller city systems are used for training purposes.

9. Number of Years in Academic and Professional Preparation Above the 8th Grade Which Is a Prerequisite to Election:
   (a) There is a markt tendency to require 6 or more years of training for teaching in the elementary schools.
   (b) More intermediate schools require training beyond 6 years than elementary, making the median number of years slightly higher in all cases.
   (c) Eight or more years beyond the elementary schools is, with very few exceptions, the standard demanded for high schools, the median in practically every group being 8½ years.

CHAPTER II

Salary Situation in the United States as Shown by Questionnaire to Individual Teachers

The salary situation thruout the country, in as far as it is shown by the salaries and living expenses of over 50,000 teachers, was obtained from the questionnaire to City and County Superintendents. These 50,000 teachers represent an adequate random sampling of all the teachers of the country, especially for city systems. However, in order to get data on the situation in greater detail, the blank shown on page 8 was prepared. This blank was to be mimeographt or printed by school officials or teachers' organizations in the different cities, so that, where possible, the returns from the teachers might supplement information given by the superintendents. Questions were askt on the blank which would reveal the salary situation and the conditions which directly or indirectly govern it, such as length of experience, amount of preparation, and similar conditions. Even more detailed information might have been askt for, but for the two reasons that the sheet had to be of a size which could be mimeographt, and that too much detailed data relative to teachers' expenses would have discouraged enough teachers from answering the questions to destroy the added value of the detailed information. Every evidence would show that the questionnaires were filled out by the teachers with perfect freedom, and that care was taken that they should not be locally inspected. This fact adds to the significance of the returns.

These questionnaires were classified according to the same size and geographical groups as were the replies from the superintendents. The work on this part of the problem was seriously delayed by the failure of enough cities in certain groups to have these blanks promptly prepared. The tabulations of the returns were held until the latest possible moment, by which time all but one of the 30 groups[1] were represented. Where more individual blanks were returned than could profitably be used in any one section, a random sampling was made in order to secure figures more representative of that particular group by including more cities. Two hundred blanks thus selected at random were set as the minimum for any group. In several groups where plenty of replies were received early in the spring, more replies were used in order to give it the added validity of greater numbers. Teachers of intermediate schools and high schools were as professionally interested in filling out the blanks as were the teachers in the elementary schools, even tho they were in most cases better paid. As large, or a larger proportion of them returned the blanks, but there

[1] Six size groups within each of five geographical groups making this total. For explana- of groups see page 9.

were so many groups, particularly for the intermediate teachers in which not enough returns were received to adequately represent that group, that it was deemed advisable to put all the intermediate teachers into one group, and similarly with the high school teachers. This gives a study of the conditions for these two, upon which valid conclusions can be based, even tho the distinction between communities and city sizes may not be shown in the same manner as for the elementary.

There are possibilities for many interesting studies in the material given in the individual teacher's questionnaire. Only those of them were selected which were considered to bear most directly upon the immediate salary problem. The following studies were selected and distributions were made in the form of correlation tables similar to the one on page 69. The distribution intervals varied for the different studies and will be indicated for each one.

1. To find the relation between "total teaching experience" and "total salary received."[1]

2. The relation between "personal living expenses" and "total salary" for the two year period involved in the questionnaire. The data were askt for only two years, since that included the period of our participation in the war, and also since it was thought figures given in most cases for living expenses before that time would be much less accurate. The living expenses were distributed over $50 intervals.

3. The relation between the "per cent of salary spent for personal living expenses" and the "total salary received" for the two years. The percentages were distributed in 5 per cent intervals.

4. The relation between the "increase or decrease of the per cent of salary spent for living expenses" in 1918-19 over 1917-18 and the "total salary received 1918-19." The distribution began at minus 40 per cent and extended in intervals of 5 per cent to plus 80 per cent.

5. The relation between the "amount spent for recreation, professional advancement, etc.," and the "total salary received" for both years. This was distributed over $10 intervals.

6. The relation between "total expenses" and "total salary received" for the two years. $50 intervals were used again. The total expense was found by adding the total personal expenses and the amount spent for recreation.

7. The relation between the "per cent of salaries spent for total expenses" and the "total salary received." Five per cent intervals were used for the per cent of salaries spent.

8. The relation between the "increase or decrease of the 'per cent

[1] Salaries in all the studies were distributed on the $50 intervals used in Chapter I.

of salaries spent for total expenses' " in 1918-19 over 1917-18 and the "total salary received." Five per cent intervals were used for the increase or decrease.

9. The relation between "total number of years of schooling" above the 8th grade and the "total salary received."

10. The relation between the "bonuses received" during the two years and the "salary received each year." These were distributed in $10 intervals.

11. The relation between "additional income" and "total salary received" for the two years. Ten dollar intervals for the additional income.

12. The relation between "age" of teachers and "total salary received." Three-year intervals used for the age.

13 and 14. The relation of "marital conditions and dependents supported" to the "total salary received."

Fifteen thousand teachers filled out this questionnaire and returned it by the first of June and fully half of these were utilized in the studies of this chapter. It was possible, because of earlier returns, to tabulate more of the questionnaires for the groups in "Size Group IV." This gives some added validity to the findings for this group which will be of as much service as any other single group, since many of the cities in Class IV are just establishing salary schedules. The number of cities answering, and used in the groups, is large enough to be representative of the cities of that size in that section. Groups BI, CI, and DI were represented almost entirely by single cities, but they are, at the same time, good types. The list given in appendix II gives the cities from which replies were received and the classification used for each city.

The problem which appeared immediately in using the large amount of material from the individual questionnaires was the form in which to put it, in order that existing conditions and tendencies might be shown in their relation to salaries. To make this possible, it was necessary to make distributions of the answers from each group for each topic studied. These were done in the form of correlation tables similar to Table L. From these tables, 609 in number for the elementary teachers and 21 each for the intermediate and high school teachers (because of combination previously explained), it is possible to get the median salaries of the teachers answering any item for each section, as well as the medians for the item under consideration. The material in these 651 correlation tables is very valuable to teachers, but some way of presenting it in a briefer space than 651 pages is necessary. Consequently, it will be presented in two ways. First, the medians existing for the several items in the several groups will be

TABLE L

CORRELATION TABLE FOR "AGE OF TEACHERS" AND "TOTAL SALARY RECEIVED (1918-19)" FOR 212 TEACHERS IN GROUP AIII.

Salary Groups	Age Groups.[1]																		Total
	15	18	21	24	27	30	33	36	39	42	45	48	51	54	57	60	63	66	
$ 300- 349																			
350- 399																			
400- 449																			
450- 499								1											1
500- 549																			
550- 599			1	1															2
600- 649		1	2	1															4
650- 699			7	9		2													18
700- 749		1	7	4	4		1		1										18
750- 799			3	5	6			1	1										16
800- 849			6	6	4	3	1	2	5	2	2	1							32
850- 899				5	1		1	2				1	1	1					12
900- 949				8	1		2	2	1	1									15
950- 999				2	5	8	4	2	3	1		1		1	1	2			30
1000-1049					5	5	3	4	1	3	2	1	1	1			1		27
1050-1099					1	1	5	2	11	3	2	1				2			28
1100-1149							1			2	1							1	5
1150-1199																			
1200-1249																			
1250-1299																			
1300-1349							1					1			1				3
1350-1399																			
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2000-2099																			
2100-2199																			
2200-2299																			
2300-2399																			
2400-2499																			
2500-2999																			
3000-and-over																			
Totals		2	26	41	27	19	20	16	23	12	7	6	2	3	2	4	1	1	212

Median for salary.... $910
Median for age..... 31.6 years

[1]15 years includes all teachers reporting age as 15, 16, and 17.

presented, and second, the correlation existing between the several items and the salary received in the several groups.

PART I.

Salary Situation as Shown by Medians of Items Studied.

All the medians of all the items studied have been assembled in Table LI., and arranged according to size and location. The number of answers used, as given in the table, is the total number of teachers whose replies were used. Teachers did not always answer all of the questions, so the number of teachers in each study varies slightly from the total number as given. This variation is in no case enough to affect the validity of the results. Because this variation is negligible, the median salary is given only once for each of the two years studied, and can be used for comparison with the items studied for the respective years.

An examination of the median salaries, as reported by the teachers, shows the same effect of size of city upon salaries as was evidenst in Chapter I. The decreases in median salaries are at about the same rate as in Table I. The median salaries are in all size groups somewhat less than the corresponding medians in Table I. This is explained by the fact that probably a larger proportion of the more poorly paid teachers filled out the blanks and returned them. It is evident from the comparison of the median salaries for 1918-19 with those of the previous year, that salaries were increast from $80 to $100 in all the groups. This corroborates the result from the answers of the superintendents, as shown in Table XIV where the median increases for the entire elementary group was $91. Except in Group V there is as much or more variation between geographical groups within any size groups as there is between the size groups themselves. In all groups, as shown in the previous chapter, the highest salaries are paid in Group E and the lowest in Group B.

In Study number 1, of Table LI, the median total teaching experience was found to decrease with the size of the city. The larger cities have greater power to hold the teachers in service. The median amount of teaching experience ranges from practically 7 years to 10¼. This is a larger figure than might be expected from previous studies,[1] but undoubtedly, the teachers who have definitely decided on teaching for a life work were more concerned with the salary problem and more interested in returning the questionnaires. The variation between median number of years *teaching experience* is as great within any size group as between groups. It does not follow that Group E, where the cities pay the highest salaries, always holds its teachers the longest. It does in only one group of the six. Size is a larger determining factor in

[1] Coffman, "The Social Composition of Teaching Population." Teaches College Contributions to Education, No. 41.

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PS SCHOOL DIVISIONS, AND ITEMS STUDIED.

Increase or Decrease of 7b over 7a (8)	No. of Years' Schooling above 8th Grade (9)	Bonus Received		Additional Income		Age of Teachers (12)
		1917-18 (10a)	1918-19 (10b)	1917-18 (11a)	1918-19 (11b)	
—4.1	6.0	$ 0	$ 50	$ 65	$ 60	31
—6.0	6.1	50	104	125	153	26
—2.0	6.2	0	0	66	105	29
—2.3	6.5	36	35	148	155	35
—1.1	6.6	39	45	115	73	37
—3.1	6.3	25	47	104	109	32
—1.1	6.1	33	135	109	98	27
—3.6	6.0	100	100	64	107	32
—4.5	5.7	55	105	71	62	31
2.4	5.5	30	0	94	145	27
—1.1	6.4	0	0	72	80	31
—1.6	5.9	44	68	82	98	30
—1.9	6.4	0	57	63	70	32
—2.8	5.8	22	25	50	105	30
—1.4	6.3	55	94	75	93	28
1.3	6.4	84	185	95	60	26
—1.6	6.5	20	0	90	125	28
—1.3	6.3	36	71	75	91	29
—0.4	6.5	55	105	75	73	30
—0.1	5.8	103	33	100	75	28
—2.3	6.3	124	123	66	40	27
—4.9	5.9	44	36	48	52	28
—2.3	6.6	45	0	153	152	29
—2.0	6.2	74	59	88	78	28
0.7	6.0	55	35	50	80	28
—2.3	5.0	46	46	67	50	28
0.3	6.2	45	45	155	40	26
1.6	6.1	35	75	110	75	26
0.05	5.8	45	50	96	61	27
—2.5	6.4	48	55	75	60	26
—5.0	4.8	105	40	97	102	29
—2.0	6.2	50	58	86	80	27
—5.0	6.4	27	25	155	75	26
—1.0	6.4	0	73	103	145	28
—3.1	6.0	46	50	103	92	27
6.0	7.5	36	33	134	63	31
—1.8	8.3	105	101	122	98	30

length of tenture than location. Intermediate teachers have the longest median experience, probably due to the tendency to put the intermediate schools under successful teachers of considerable experience in order to insure the success of the new schools. High school teachers have a shorter median length of experience than elementary or intermediate, which about balances the extra time spent by them in securing the additional preparation demanded for teaching in high schools.

In Studies 2a and 2b, Table LI, on the personal living expenses for the years 1917-18 and 1918-19, it is evident that the increase in the median cost of living is greater in the larger cities than in the smaller. It is also evident that a large part of the increase in salary received in the two years was used for increast personal living expenses. In Groups I and IV the increase in median living expenses was greater than the median increase in salary. There seems to be no general tendency for living expenses to have increast more in any one section of the country than another. The increase in cost of living would probably have been shown to be even higher had it not been for the fact that quite a few teachers recorded their living expenses up to the time of filling out the questionnaire and did not so indicate it. These were then used as the expenses for 12 months and compared with other statements for annual expenses.

In Studies 3a and 3b of Table LI the median percentages of salaries spent for living expenses are given. Percentages are astonishingly even, with but a slight increase in percentage spent as the median salaries decrease in the smaller localities. This shows that the decreast cost of living in the smaller places nearly offsets the decreast salary, at least so far as the percentage spent is concerned. This is a dangerous conclusion from which to get any satisfaction. The cost of living is rapidly becoming standardized, and the cost of attendance at colleges and summer sessions is increasing in proportion to the other increases. Even tho 13 per cent of the median salary for 1917-18 for Group V is left as compared with the 18 per cent for Group I, the discrepancy is doubled, in that the 13 per cent is on a smaller salary than the 18, and yet the cost of living and of education and professional advancement is very much the same in both instances. The intermediate group has a median percentage the same as the lowest of the elementary groups, which might be expected from the higher median salaries of the intermediate teachers. The same holds true for the higher median of high school teachers. Since there is only one instance in the elementary groups where the median percentage spent is under 80 per cent, it is a safe conclusion that in practically all groups thruout the country the teachers have a median of *less than 20 per cent* of the salary to spend for "recreation, books, magazines, travel, professional

advancement, savings, etc." This will at once be recognized as much too small. Practically no authorities on the making of budgets give less than 20 per cent for so-called "higher life" and many of them advocate 25 and 30 per cent. It seems obvious that teaching, along with the other professions, should demand even a higher percentage for these items than the ordinary family whose budgets have been made the subject of investigation in most of the studies.

Study 4, Table LI, shows the increase or decrease in the per cent of salary used for personal living expenses in 1918-19 over 1917-18 to be very small. The largest median increase for any size group is but .8% and the decrease 1.8%. It indicates that for the majority of teachers thruout the sections, the percentage of expenditure in the second year was practically the same as in the first. This is but a corroboration of what would be inferred from comparing the percentages in columns 3a and 3b. The variation in the increase and decrease within any group is very little more than that between the groups. The largest instance of decrease was in Group BI, where there was a 5 per cent decrease. In the same group, however, the salary increast in the same time almost 20 per cent, showing that there was an attempt in the city from which these figures were taken to adjust salaries to the cost of living.

Studies 5a and 5b, Table LI, give the median amounts spent for "recreation, professional advancement, etc.," for the year 1917-18 and 1918-19. Here again there is surprising uniformity, and an astonishingly small amount for the median expenditures in the different groups. The size of the city does not materially affect the amount spent for these items, except in the two smallest groups, and here only slightly. The highest median amount spent by any group for these items is only $88 for the year. How inadequately must the items of recreation, outside reading, professional advancement, travel, philanthropy, insurance, savings and these other necessary items have been provided for by the half of the teachers in this group who spent less than $88 on all of these items combined. A study of the actual distributions of these items will show a range between zero and $500, with relatively few instances in excess of $100. These figures offer a very drastic criticism on existing salary conditions, since they show a teacher's utter inability to care for this important side of her work in an adequate manner.

Studies 6a and 6b, Table LI, which give the median total expenses for the years 1917-18 and 1918-19, show a condition not very different from that developt in the study of living expenses in 2a and 2b. In fact, due to the very small expenditure for recreation and professional advancement, the total expenditures which are obtained by adding the

amount spent for living expenses and the amount spent for recreation and professional advancement are in most cases not so high as they should be. Here, as before, we find the expenses for 1918-19 in all cases increast over those of the previous year about as much as the salary was increast. A direct relation between size of the city and the amount of total expenses is repeated.

A more interesting view of this situation is obtained from Studies 7a and 7b, Table LI, which give the median percentages of the total salary spent for total "necessary expenses." From these medians it is seen that the teachers who are receiving median salaries are spending perilously near to 100 per cent of their salary. If this is true about the median, the condition must be very bad for those whose expenses go above the median. There are 15 instances during the two years where the median expenditure for a group was 100 per cent of its income or more, indicating that in these 15 groups, half of the teachers were compelled to spend more than they made. These statements may be criticized from the standpoint that teachers ordinarily are not in debt. If, however, the expenses of the summer have to be borne by the teacher rather than by her family, the chances are that she will, in a majority of cases, begin the year in debt. In one of the groups 67 per cent of the teachers were compelled to spend more than 100 per cent of their incomes. This, in a way, is confirming evidence of the conclusions drawn from the study of the cost of "board and room" in Chapter I.

Study 8 of Table LI gives the median increase or decrease in per cent of total salary spent for total expenses, and shows a more consistent and larger decrease in per cent of salary spent than was shown for living expenses in Study 4. Other things being equal, this may be interpreted to mean that the per cent of the total salary spent for recreation, professional advancement, etc., was smaller in 1918-19 than in 1917-18. Two elements probably cause this difference: first, the curtailment of all expenses which were not necessary, both because of higher costs and in order to invest in the war loans, and, second, the necessity for estimating the expenses for the coming summer as to travel, self-improvement, etc. It is noteworthy that in Section B in all the groups, a decrease in percentage of salary spent is shown, and that the decrease compares very favorably with the returns from other wealthier sections. This indicates a widespread tendency in cities of all sizes in this section to improve salaries, even tho they yet remain relatively low when actual salaries are considered.

Study 9, Table LI, on the median number of years' schooling above the 8th grade, shows the median amount for elementary teachers to be 6 years, 7.5 for intermediate teachers, and 8.3 for high school

teachers. These medians are a little lower, generally, than the standards set by the superintendents for election at the present time, except for intermediate teachers. This median is materially raised by the presence in the intermediate schools of a large number of college graduates, even tho the minimal requirement is set lower by most superintendents.

Studies 10a and 10b, Table LI, are very unsatisfactory, and, as given, somewhat misleading. The medians as given represent the median bonus received by those teachers who received bonuses during the year, and does not show the very large majority who did not receive any bonus. The medians as given will have to be studied in comparison with Table LII.

TABLE LII
SUMMARY OF BONUSES RECEIVED 1917-18 AND 1918-19.
(Data received from answers given to the questionnaire to teachers.)

	Total number of teachers		Number receiving no bonus		Per cent receiving a bonus		Average median bonus	
	1917-18	1918-19	1917-18	1918-19	1917-18	1918-19	1917-18	1918-19
Elementary...	5556	5556	4759	4634	14.7%	15.5%	$24.90	$ 46.77
Intermediate..	454	466	403	405	11.0%	13.1%	36.00	32.50
High School...	788	811	692	698	12.1%	13.9%	98.40	101.10

This shows that 85 per cent or more of the teachers answering this question did not receive a bonus. With this fact in mind the question of bonus received is almost a matter of no consideration, since even for the few teachers receiving a bonus the median sum is very small—not exceeding $74 in any group, except for the high school teachers. There seems to be no distinct testimony for any city size or geographical group to grant more or larger bonuses than the other group. A very slight tendency might be said to exist in Group E. The sporadic cases of granting bonuses to adjust the salary problem may be considered as having made almost no contribution when the whole teaching population is considered. A bonus as ordinarily given to teachers is a philanthropically inspired and begrudged donation to an underpaid and long-suffering group of public servants, in order to tide them over a period of financial stringency. It is given without appreciation of the work done or the deserved reward, and implies the desire to keep teachers on the present schedule rather than to make a permanent advance in salary.

Studies 11a and 11b of Table LI give the median "additional incomes" earned during 1917-18 and 1918-19. This additional income, as askt for in the questionnaire, is for "tutoring, evening school, summer work, writing, lecturing, etc.," and the medians given are

only for those who earn an additional income. The medians, as in Studies 10a and 10b, must be interpreted in the light of Table LIII.

TABLE LIII

SUMMARY OF ADDITIONAL INCOME EARNED 1917-18 AND 1918-19.
(Data received from answers given to the questionnaire to teachers)

	Total number of teachers		No. Earning no additional income		Per cent Earning an additional income		Average Median additional income	
	1917-18	1918-19	1917-18	1918-19	1917-18	1918-19	1917-18	1918-19
Elementary...	4684	4801	3891	4205	16.9%	12.4%	$91.38	$87.96
Intermediate..	420	460	337	406	19.8%	11.7%	133.75	63.33
High School...	879	909	559	663	36.4%	24.6%	122.30	98.33

According to these returns only one teacher in five has any additional income, and for this one-fifth the median amount is below $100 in most of the groups. From this it would seem that a majority of teachers give their entire time to teaching and use the summer to rest and regain energy and enthusiasm. An examination of the salaries of the teachers earning additional incomes will show a wide range in the distribution, but does not show the usual bunching of cases about the median point. There are in many of the groups two modes, one below the median with more cases in the $500 and $600 salary groups, and the other above the median, centering around $1,200. The first group is probably driven to lucrative occupations during the vacations by force of necessity. The second is probably due to the spur of ambition and the more numerous opportunities which come to the teachers receiving the higher salaries because of their greater ability or their better preparation. There seem to be no distinct sectional influences upon the matter of additional incomes. It is more truly an individual matter in most cases.

Study 12 shows the median age of teachers. The size of the city affects the median age, which decreases as the size decreases, due undoubtedly to the greater prevalence of tenure of office regulations in the larger cities. There is no evidence of geographical influence upon the median age of teachers. If the median age in the size groups be considered in relation to the median experience, they show that the teachers, as indicated by the medians, began teaching about their 20th year of age. This does not allow time for much maturity, nor for professional preparation. Since practically all of the teachers in the elementary and intermediate schools are women, it is possible to compare the results here with those obtained by Coffman[1] in 1911. At that time he found "the typical American female teacher is twenty-four

[1] Coffman, "The Social Composition of the Teaching Population." Teachers College Contribution to Education, No. 41.

years of age, having entered teaching at the early part of her nineteenth year, when she had received but four years' training beyond the elementary schools." If the typical teacher is determined in the same way from the medians found in this study, an advance is found in all three items. The median age is three or more years more and the length of experience and the amount of preparation are both over two years higher. Since Coffman's data was obtained principally from rural teachers, while the data of this study is more truly representative of city conditions, this difference can not be construed as an advance but rather as a contrast between urban and rural conditions.

Studies 13 and 14 were made, but the results were not of a nature to yield to the same treatment as the other items studied. The question of how many teachers have others dependent upon them is a much discust one, but few studies of existing conditions have been made. In tabulating the answers it was necessary to evaluate the burden represented by having one person "partially dependent" as compared with "one person entirely dependent." The judgments of several school men were secured, and it was finally arbitrarily decided that, as ordinarily reported, one "partial dependent" would represent about one-fifth of the financial burden of an "entire dependent." This was applied only when a teacher reported persons both entirely and partially dependent, *e. g.* a teacher reporting 2 persons entirely dependent, and 4 persons partially dependent, was listed as having 3 persons entirely dependent (fractions were used to the nearest unit). In this way no teacher was recorded more than once. The results of the answers are given in Table LIV, in the percentages of teachers having others dependent upon them. The returns are arranged by size groups, and the relation of dependents to salary received may be inferred from the median salaries of the groups.

TABLE LIV

PERCENTAGES OF TEACHERS SUPPORTING OTHERS, EITHER ENTIRELY OR PARTIALLY.

Arranged for the Size Groups and for School Divisions.

	% having no dependents	% having one entirely dependent	% having 2 or more entirely dependent	% having one partly dependent	% having 2 or more partly dependent	Total % having dependents either entirely or partially
Elementary:						
Group I	35.1	17.2	12.0	18.0	17.6	64.9
Group II	52.1	16.9	7.1	13.6	10.2	47.9
Group III	55.1	10.5	3.6	17.8	13.0	44.9
Group IV	56.6	10.5	4.6	14.8	13.4	43.4
Group V	62.2	11.7	3.7	12.4	10.0	37.8
Group VI	63.2	9.0	3.4	14.5	9.7	36.8
Intermediate:						
All Groups	57.0	12.7	7.4	14.1	8.8	43.0
High School:						
H. S. Women (all groups)	58.2	9.8	3.9	16.6	11.5	41.8
H. S. Men (all groups)	12.3	16.8	57.2	3.5	10.2	87.7

This table answers rather definitely the question whether teachers as a class have others dependent upon them. Forty-six per cent of elementary teachers, 43 per cent of intermediate and 42 per cent of high school teachers have others either entirely or partially dependent upon them. More than half of the dependents reported represent partial dependents, which does not make the financial burden as heavy to carry as the percentages might indicate. It does, nevertheless, make it evident that teachers as a class are not free from the responsibilities of having others dependent upon them for support. There seems to be no other explanation for the regular decrease in the percentage of teachers having dependents, shown in the last column of Table LIV, than that the corresponding decrease in salaries as the size of the cities decrease makes the support of others financially impossible. Every other column in the table adds weight to the same conclusion. Not enough men reported from the elementary and intermediate schools to make the comparisons possible, but in the 1,310 replies from high schools, 775 women answered the question on dependents, and 285 men. This made possible the separation of the men for a separate tabulation. The results show that only 12 per cent of the men who reported from high schools were *not* supporting dependents. The 57 per cent of men teachers in the high school who are supporting families of "two or more" dependents indicates that men teachers will undertake family responsibilities if the salary will in any way permit. Seventy-four per cent of the men have one or more people *entirely* dependent upon them. This is from three to six times as large as the percentage in any other group. The next highest percentages are in Group I, where the salaries are also higher. It is obvious from Table XLVII that the present salary schedules are directly or indirectly responsible for the rapidly declining number of men in the work of teaching.

PART II.

Salary Situation as Shown by Coefficients of Correlation Between the Items Studied and the Salaries Received.

Another way of showing how the salaries of the teachers in the various groups were influenst by and related to the items studied in Part I of this chapter, is to express the closeness of the relation (or "going togetherness") of the two items under consideration by a single index known as the coefficient of correlation (represented by "r"). Those used in this chapter were found from the 651 correlation tables similar to Table L by a modification of "Sheppard's Method of Unlike Signs."[1] Coefficients of correlation found by this method are in a

[1] For description of method used see Appendix III.

way only approximations, but they are reliable enough to show the presence or absence of a distinct tendency when any such exists. Where the distributions were irregular in any way or heavily buncht upon the median step the coefficients were checkt by using Pearson's "Coefficient of mean square contingency."[1] In this way it was shown that with the data used, the modification of Sheppard's Formula gave results which were reliable enough for detecting tendencies. They are, however, *not reliable enough to make comparisons between two* groups when the "r" values are for example .10 and .25 or even where greater differences exist.

In tables LV and LVI these coefficients are arranged according to groups, school divisions and items studied and give the results in a form to facilitate easy comparison with the data[2] in the companion table LI of Part I.

Only general and obvious conclusions will be made from the data presented in Tables LV and LVI.

Study 1, Table LV. A high coefficient of correlation exists between "total teaching experience" and "total salary received" during 1918 and 1919. The coefficient decreases with the size of the city and is rather uniform as far as geographical groups are concerned. This confirms the statement that the larger cities hold their teachers longer and pay them better.

Studies 2a and 2b, Table LV, show a markt positive correlation between "amount spent for personal living expenses" and "total salary received." There is no consistent variation due to geographical location or to size of cities. The coefficients indicate that the larger the salary a teacher receives, the more she spends for personal living expenses, which in turn could be made to show that the majority of teachers are living on a level lower than is desirable for them, both from the standpoint of personal desire and efficient work. As a result, an increase in salary goes merely to provide more comfortable room or more desirable board, more prompt medical attention and more adequate supply of necessary clothing, rather than to savings, professional advancement, recreation, etc.

Studies 3a and 3b, Table LV, give very small negative coefficients between per cent of "total salary spent for personal living expenses" and "total salary received." This indicates a *slight* tendency, which is consistent thruout the size groups, for teachers receiving the highest salaries to spend a smaller percentage of the salary for living expenses. The very small coefficients indicate that there is so little lee-way between the salary received and the percentage of that salary spent

[1] For description of this method and the results of its use see Appendix III.

[2] Items 10, 11, and 14 are not included in this table as the returns were either too few to be used or not in a form to be readily correlated.

for living expenses that even differences of $200 or $300 between groups do not influence the coefficients.

Study 4, Table LV, on the relation of the increase or decrease of the "per cent of salary spent for living expenses" in 1918-19 over those of 1917-18 and the "total salary received" developt absolutely no consistent relationship. In other words it was a matter of pure chance whether those receiving higher salaries increast or decreast the percentage of their salaries spent for living expenses.

Studies 5a and 5b, Table LV, result in insignificant positive coefficients between the "amount spent for recreation, professional advancement, etc.," and "total salary received," which would indicate that those receiving higher salaries not only are able to spend more on self improvement, but are slightly more apt to do so.

Studies 6a, 6b, 7a, 7b, and 8, Table LVI, produce coefficients which substantiate the findings of studies 2a, 2b, 3a, 3b, and 4 except that if possible they show even more clearly that under present conditions, it is necessary for a teacher to spend practically all of her salary for her "total necessary expenses," regardless of how much that salary is or where it is received.

Study 9, Table LVI, for the relation between "total numbers of years schooling above the 8th grade" and "total salary" furnishes a decided upset for any preconceived notion that additional schooling is always rewarded by additional salary. The presence of negative (—) coefficients, some of them large enough to indicate strong correlation in many of the groups, shows that for those groups the teachers receiving salaries above the medians tend to have "years of schooling" below the median amount. This is truer in the larger cities, where the higher salaries are received by teachers of longer experience who entered when standards of preparation were lower, while the younger teachers who have prepared more thoroly are teaching at beginners' pay. There is no section where any consistent correlation is shown, and except for cities in Size Groups I and II, the average of the coefficients is so low that "mere chance" is the governing rule. This, however, shows a condition which is worth the serious consideration of teachers and school men, because additional schooling should represent an investment with more certain returns than "pure chance."

Study 12, Table LVI, gives the coefficients of correlation for teachers' "age" and "total salary received" (1918-19) and shows a distinct relation between age and salary. It pays to grow old in the work of teaching, and especially in the larger cities. The average of the coefficients for size groups decreases as the size of the cities decreases, but the "r" value is large enough to be significant even

TABLE LV

SUMMARY OF THE COEFFICIENTS OF CORRELATION[1] BETWEEN THE "TOTAL SALARY RECEIVED" AND THE VARIOUS ITEMS STUDIED[2] FROM THE QUESTIONNAIRE TO TEACHERS[3] ARRANGED ACCORDING TO GROUPS[4], SCHOOL DIVISIONS, AND ITEMS STUDIED

Note: These coefficients are taken from the 651 correlation tables similar to the sample shown on page 69

Group	Total Teaching Experience (1)	Personal Living Expenses 1917-18 (2a)	Personal Living Expenses 1918-19 (2b)	Per cent of Salary spent for Living Expenses 1917-18 (3a)	Per cent of Salary spent for Living Expenses 1918-19 (3b)	Increase or Decrease of 3b over 3a (4)	Recreation, Professional Advancement, etc. 1917-18 (5a)	Recreation, Professional Advancement, etc. 1918-19 (5b)
Elementary Teachers								
A I	r = .95	r = .64	r = .66	r = —.16	r = —.04	r = —.03	r = .09	r = .19
B I	.73	.48	.75	.45	—.20	.00	.16	.22
C I	.94	.79	.56	.01	—.28	—.17	.31	.00
D I	.89	.34	.40	—.03	—.16	.13	—.02	.03
E I	.68	.25	.25	—.22	—.17	.06	—.02	.09
AV. & P.E[5].	.84 ± .03	.50 ± .06	.52 ± .05	—.17 ± .05	—.17 ± .03	.00 ± .03	.10 ± .04	.11 ± .03
A II	r = .90	r = .66	r = .55	r = —.23	r = —.31	r = .13	r = .02	r = .02
B II	.60	.68	.48	.03	—.14	—.59	—.02	.09
C II	.70	.71	.48	.03	—.22	.00	.00	—.17
D II	.90	.66	.73	—.19	—.12	.22	.06	—.06
E II	.45	.59	.34	—.28	—.34	.00	.25	.19
AV. & P.E[5].	.72 ± .05	.66 ± .02	.52 ± .04	—.12 ± .04	—.22 ± .03	—.05 ± .09	.07 ± .03	.01 ± .04
A III	r = .58	r = .79	r = .59	r = .25	r = .31	r = .28	r = .13	r = .06
B III	.51	.43	.72	—.16	.03	—.03	.25	.13
C III	.56	.31	.13	—.09	—.25	—.09	.09	—.09
D III	.66	.25	.19	—.35	—.34	—.12	.24	.25
E III	.75	.45	.34	—.48	—.28	.23	.16	.05
AV. & P.E[5].	.61 ± .03	.44 ± .05	.39 ± .07	—.17 ± .07	—.11 ± .07	.05 ± .05	.17 ± .02	.08 ± .04
A IV	r = .55	r = .71	r = .66	r = —.34	r = —.37	r = —.06	r = .34	r = .25
B IV	.67	.61	.48	—.25	—.28	—.31	.00	.06
C IV	.31	.68	.68	—.23	—.56	.03	.09	.03
D IV	.34	.70	.56	—.04	—.13	.16	.19	.03
E IV	.39	.68	.66	—.03	—.25	—.06	.25	.37
AV. & P.E[5].	.45 ± .04	.68 ± .01	.61 ± .02	—.17 ± .04	—.32 ± .04	—.05 ± .05	.17 ± .04	.15 ± .04

A V	r = .34	r = .54	r = .61	r = —.13	r = —.06	r = .00	r = .06	r = —.03
B V	No data for this group							
C V	.51	.61	.66	—.29	—.11	.08	.09	.06
D V	.51	.79	.75	.02	—.03	.06	.01	.19
E V	.59	.43	.34	—.31	—.31	.03	.13	.13
AV. & PE[5]	.49 ± .03	.57 ± .04	.57 ± .05	—.18 ± .04	—.13 ± .04	.04 ± .01	.06 ± .02	.09 ± .03
A VI	r = .45	r = .81	r = .75	r = —.13	r = —.06	r = —.02	r .20	r = —.19
B VI	.45	.37	.59	—.25	.06	.04	.22	.06
C VI	.25	.53	.41	—.43	—.50	.00	.31	.03
D VI	.78	.54	.44	.03	.06	—.56	—.09	—.34
E VI	.16	.68	.71	—.13	.06	.02	.16	.19
AV. & PE[5]	.40 ± .06	.58 ± .05	.58 ± .04	—.18 ± .05	—.08 ± .06	—.10 ± .07	.16 ± .04	—.05 ± .06
Intermediate Teachers All Groups	r = .56	r = .71	r = .77	r = —.13	r = .03	r = .13	r = —.06	r = —.09
High School Teachers All Groups	r = .48	r = .68	r = .56	r = —.09	r = — .16	r = .06	r = .51	r = .19

[1] Coefficients of Correlation computed according to the method shown in Appendix III.
[2] For list of studies made see page 67 ff.
[3] For copy of teachers' questionnaire see page 8.
[4] For explanation of groups see pages 9.
[5] Probable error computed according to formula given on page 167 Appendix III.

TABLE LVI

SUMMARY OF THE COEFFICIENTS OF CORRELATION[1] BETWEEN THE "TOTAL SALARY RECEIVED" AND THE VARIOUS ITEMS STUDIED[2] FROM THE QUESTIONNAIRE TO TEACHERS[3] ARRANGED ACCORDING TO GROUPS,[4] SCHOOL DIVISIONS, AND ITEMS STUDIED.

Note: These coefficients are taken from the 651 correlation tables similar to the sample shown on page 69.

Group	Total Expenses		Per cent of Salary Spent for Total Expenses		Increase or Decrease of 3a over 3b	No. Years Schooling Above 8th Grade	Age of Teachers
	1917-18 (6a)	1918-19 (6b)	1917-18 (7a)	1918-19 (7b)	(8)	(9)	(12)
Elementary Teachers							
A I	r = .79	r = .77	r = —.23	r = —.11	r = —.03	r = —.41	r = .88
B I	.56	.84	—.51	—.40	—.25	—.64	.83
C I	.83	.64	—.11	—.31	.15	—.40	.83
D I	.31	.53	—.34	—.11	.25	—.20	.81
E I	.43	.16	—.19	—.41	.14	—.13	.56
AV. & PE[5]	.52 ± .06	.59 ± .07	—.27 ± .04	—.27 ± .04	.05 ± .04	—.36 ± .05	.78 ± .04
A II	r = .71	r = .41	r = —.26	r = —.31	r = —.05	r = —.16	r = .92
B II	.77	.86	—.13	—.25	—.43	—.44	.59
C II	.63	.44	—.27	—.32	.13	—.34	.83
D II	.64	.66	—.31	—.13	.16	—.40	.89
E II	.51	.45	—.31	—.16	—.09	.25	.73
AV. & PE[5]	.65 ± .02	.56 ± 05.	—.26 ± .02	—.23 ± .02	—.06 ± .06	—.22 ± .04	.79 ± .04
A III	r = .84	r = .68	r = .22	r = .19	r = .16	r = —.03	r = .68
B III	.47	.59	—.13	—.16	—.48	.61	.34
C III	.43	.32	—.25	—.25	—.09	.28	.61
D III	.40	.37	—.71	—.22	.16	.13	.56
E III	.61	.49	—.56	—.25	.16	—.13	.74
AV. & PE[5]	.55 ± .05	.49 ± .04	—.29 ± .10	—.14 ± .05	—.02 ± .07	.17 ± .08	.58 ± .04
A IV	r = .78	r = .73	r = —.43	r = —.31	r = .00	r = .06	r = .53
B IV	.66	.58	—.35	—.37	—.06	—.56	.59
C IV	.60	.59	—.43	—.34	—.22	.13	.40
D IV	.76	.59	—.34	—.21	.15	—.22	.48
E IV	.72	.64	—.36	—.55	—.19	—.16	.41
AV. & PE[5]	.70 ± .02	.63 ± .02	—.37 ± .02	—.36 ± .03	—.06 ± .04	—.17 ± .07	.48 ± .02

A V	r = .68	r = .77	r = —.1	= —.22	r = —.11	r = —.17	r = .28
B V		No data for this group					
C V	.70	.66	—.22	—.09	.03	.13	.56
D V	.81	.77	—.34	—.14	.06	.13	.37
E V	.48	.61	—.31	—.22	.03	.19	.73
AV. & PE[5]	.67 ± .04	.70 ± 02.	—27. ± .02	—.17 ± .02	.06 ± .03	.07 ± .05	.49 ± .06
A VI	r = .83	r = .82	r = —.22	r = —.03	r = —.06	r = .14	r = .46
B VI	.37	.54	—.09	—.19	.00	.22	.30
C VI	.55	.38	—.45	—.52	.06	—.37	.43
D VI	.56	.40	—.06	—.23	—.16	—.06	.68
E VI	.66	.72	—.14	.05	—.13	—.05	.16
AV. & PE[5]	.59 ± 05	.57 ± .05	—.19 ± .04	—.18 ± .05	—.06 ± 03	—.02 ± .06	.40 ± .05
Intermediate Teachers All Groups	r = .75	r = .75	r = —.22	r = — .09	r = .19	r = .40	r = .64
High School Teachers All Groups	r = .63	r = .56	r = —.13	r = — .17	r = .13	r = .31	r = .37

[1] Coefficients of Correlation computed according to the method shown in Appendix III.
[2] For list of studies made see page 67 ff.
[3] For copy of teachers' questionnaire see page 8.
[4] For explanation of groups see page9.
[5] Probable Error computed according to formula given on page 167 Appendix III.

in the groups of smaller cities. The correlation is consistent thru the several geographical groups.

CONCLUSIONS—CHAPTER II

General

1. The returns from the teachers' questionnaires show the salaries to be about the same in almost all groups as that given in Chapter I from Superintendents' Reports.

2. Decrease in the size of the city is accompanied by decrease in the amount of the salary.

3. Sectional differences are found to the same extent as in Chapter I.

4. Salaries of teachers are entirely inadequate to meet the standards demanded and the economic conditions existing during the two years studied.

5. As judged by the answers of teachers, they are meeting the requirements outlined in the reports of superintendents, they are making more adequate preparation for their work and they are staying in the work longer. These are signs that teaching is tending toward professionalization.

Specific: Study 1.—Total Teaching Experience

a. The larger the cities the longer the teaching experience.

b. Location has less influence on experience than size of city.

c. There is a high correlation between salary received and length of experience. It decreases with the size of the cities.

Study 2a and 2b—Personal Living Expenses

a. Living expenses decrease as the size of the cities decrease but not as rapidly as the salaries paid.

b. Differences in amount of personal living expenses due to location are less than those due to city size. They are generally higher where the salaries are higher.

c. Personal living expenses increast almost as much as salaries increast between 1917-18 and 1918-19.

d. There is a distinct positive correlation between the amount spent for living expenses and salary received. It is not affected by size or location of cities.

Study 3a and 3b—Per Cent of Salary Spent For Personal Living Expenses

a. Teachers are spending five-sixths of their salaries for necessary personal living expenses.

b. There is only a slight increase in per cent spent as the cities decrease and as the salaries become consequently smaller.

c. There is a small negative correlation between the amount of the salary and the per cent spent for living expenses, indicating that the higher salaries spend slightly less for living expenses. The fact that the correlation is so slight, indicates that all salaries are so low that even the higher ones do not have a margin for saving, but are all needed for necessary expenses.

Study 4—Increase or Decrease in Per Cent of Salary Spent For Living Expenses in 1918-19 Over 1917-18

a. There was practically no increase or decrease in 1918-19 over 1917-18. This indicates that the increases given to teachers were not more than enough

to meet the increases in living expenses. This was true for all groups, size and geographical.

b. There is no correlation between salary received and an increase or decrease in per cent spent by individual teachers on living expenses.

Study 5a and 5b—Amount Spent For Recreation, Professional Advancement, etc.

a. The median amount spent by teachers per year for recreation, professional advancement etc. is less than $75. On the basis of 25 per cent for "higher life" this much should be spent from a salary of $300.

b. $75 per year might well be spent on periodicals and library additions alone, and is entirely too small for either recreation or professional advancement (other than reading).

c. The amount spent for these items is uniformly small in all groups, both size and geographical.

d. Only an insignificant positive correlation exists between the salary received by teachers and the amount spent for these items.

Study 6a and 6b—Total Expenses

a. Total expenses decrease as the size of the cities decrease.

b. Between groups, total expenses vary directly in proportion to the salary paid.

c. For individual teachers, the higher salary the more the total necessary expenses. This is true for all groups.

Study 7a and 7b—Per Cent of Salary Spent For Total Expenses

a. In 85% of the groups during the two years the median per cent of salary spent for total expenses was 90% or over. (Efficiency and budget experts give 10% as the least margin for net savings).

b. A noticeable negative correlation exists between salary received and per cent spent for necessary expenses, indicating that the smaller the salary the larger the per cent of it used for these expenses.

Study 8—Increase or Decrease in the Per Cent of Salary Spent for Total Expenses in 1918-19 Over 1917-18

a. Increases given to teachers and curtailment of expenses for recreation and professional advancement produced a small decrease in the per cent spent for necessary expenses.

b. There is no correlation between salary received and an increase or decrease in the per cent spent for necessary expenses in 1918-19 over 1917-18.

Study 9—Years of Schooling Above the Eighth Grade

a The median number of years schooling above the 8th grade is over six, seven and eight for the elementary, intermediate, and high school respectively.

b. From the negative coefficients found between salary and schooling, especially in the two largest groups, it would seem that there is an association of higher salaries with fewer years of schooling.

Study 10a and 10b—Bonus Received

a. Over 85% of the teachers reported receiving no bonus.

b. The average bonus of the few teachers receiving them during the two years would not exceed $35,(Elementary and Intermediate).

c. The granting of bonuses is a temporary adjustment and was resorted to only in a very few cases.

Study 11a and 11b—Additional Income Earned

a. Only about 20% of the teachers reporting earned any additional income.

b. For the 20% earning additional income the average amount earned would not exceed $100.

Study 12—Age of Teachers

a. The median age for teachers increases as the size of the city increases.

b. The median age of teachers is approximately 30.

c. Teachers are more seriously preparing themselves for the work of teaching and are tending to stay in the work longer.

d. There is a distinct correlation between age and salary received. The older teachers are more apt to receive the higher salaries.

Study 13 and 14—Dependents Supported by Teachers

a. A larger percentage of teachers support dependents as the size of the city increases with its accompanyingly larger salary.

b. Individual teachers support more dependents in the larger cities than in the smaller places.

c. About the same percentage of women teachers report dependents in each of the divisions, elementary, intermediate and high school.

d. Among high school teachers, a much larger per cent of men support dependents than do the women.

e. Nearly 60% of the men high school teachers support families of two or more entire dependents.

CHAPTER III.

The Salary Situation in the United State as Shown by Letters From State Superintendents

As a result of the National Education Association's campaign and the sharp realization on the part of teachers of the need for better salaries, there was almost nation-wide agitation on the question during 1918-19. In order that teachers may have the benefit of knowing what has been considered and what has been accomplisht by the legislatures of the various states, a letter was sent by President Geo. D. Strayer to State Commissioners and Superintendents of Public Instruction, asking them to report any bills on the question of teachers' salaries which were past by their State Legislatures. They were askt to report any legislation then pending as well as any noteworthy actions by local school boards in meeting the situation. Answers were received from 37 states, and will be arranged in the same geographical groups which have been used in the remainder of the study.

Group A—Connecticut

Connecticut proposed the granting of $3.00 per pupil in average attendance. This would bring a material increase to salaries, but has not yet been approved by the Governor, because all of the increase would not go to teachers' salaries. Another bill was proposed which would give state aid to districts in proportion to their valuation, so that the state would carry 75 per cent of teachers' wages for some of the smaller places, and from that down to 20 per cent. Secretary Hines writes "teachers' salaries in this state are very generally increasing from 10 to 30 per cent. We anticipate a state increase of 15 to 20 per cent."

Delaware

A New School Code was establisht for Delaware, granting material increases in the salaries of teachers. State Commissioner Spaid reports that "the State makes an annual appropriation to cover the entire expenses, including railroad fare, of the teachers who wish to attend summer school for a period of six weeks within the State, and gives to certain other teachers a lump sum of $50.00 to help defray their expenses at any standard summer school without the State."

Massachusetts

Commissioner Payson Smith of Massachusetts is strongly supporting a bill now pending in the State Legislation to provide state subsidies for teachers. For each person employed for full-time service for 12 months as superintendents of schools, the city or town shall be

reimburst by $750 if the superintendent's salary is not less than $1,800, and reimburst by $500 if the salary is not less than $1,500. For teachers employed for full time, the city or town shall be reimburst by $200 for each teacher having received a salary not less than $850; $150 for each teacher having received a salary not less than $750 (with limiting conditions upon professional training, etc.) and $100 for each person having received a salary of not less than $650. Subsidies for part-time superintendents and teachers will be paid according to the above plan, and in proportion to the time served. Provision is also made in the bill to provide supplementary reimbursements according to the per pupil valuation of the different cities or towns, ranging from $300 for per pupil valuation of less than $2,000 to $50 if the per pupil valuation is less than $4,500, but not less than $4,000, with the intermediate steps in proportion.

New Hampshire

New Hampshire past a bill providing for the establishment of a State Board of Education and the standardization of teachers' salaries. Deputy Commissioner of Education, Harriet L. Huntree, says "there is no definite statement of a minimum salary. It is generally understood, however, that the rural school teachers will receive at least a minimum salary of $15.00 a week, but no legislation so states."

New York

One of the most significant pieces of salary legislation, because of the standards set and the number of teachers involved, was the state-wide teachers' bill past by New York. For New York City a minimum wage for teachers of kindergarten and the first six grades of $1,005 is provided with a maximum of $2,160. In grades 7, 8 and 9, the minimum becomes $1,350 and the maximum $2,700. In high school salaries of regular teachers range from $1,350 to $3,150. First assistants in high schools begin at $2,650, and reach a maximum of $3,650. For cities of the first class, with populations less than one million, the minimal salary is set at $800 for elementary teachers, and $1,200 for high school teachers. For cities of the second class the elementary minimum is $800 and the high school minimum is $1,000. The bill also provides that every school district shall make a salary schedule providing in districts of the first and second class, at least eight annual increments above the minimal salary set.

Pennsylvania

The "Woodruff Salary Bill" was past at the last session of the State Legislature. This bill provided for a general increase of teach-

ers' salaries thruout the State and, according to Acting Superintendent Koch, has the hearty support of teachers and of the people.

Rhode Island

Commissioner Ranger reports that the "Rhode Island General Assembly enacted legislation that aims to raise the teachers' minimum salary from $400 to $500. The new act is not mandatory in establishing the $500 minimum. It offers to towns that increase salaries previously lower than $500, one-half of any increase not exceeding one-half the difference between the salary previously paid and $500." "Most of our school committees have increast salaries during the current school year and several have increases for next year under consideration."

Group B—Alabama

Superintendent Dowell writes that "there is a general sentiment favorable to the increase of salaries, but no bill has been presented to the Legislature, and so far as I know none has been prepared. It may be stated that all boards of education are prepared to increase salaries to the limit of available funds."

Arkansas

Superintendent Bond reports that "Our Recent Legislature did not pass any special legislation affecting teachers' salaries. I may say in this connection that our annual school election was held recently. From reports coming into this office, it seems that practically all districts, both urban and rural, are voting the full tax limit." This is the result of a vigorous campaign in the interest of increast local taxes and higher salaries which was conducted by the State Department of Arkansas during the last year.

Florida

No legislation was enacted in Florida at the last session on the subject of teachers' salaries. State Superintendent Sheats thinks "County Boards generally, thruout the State, are making strenuous efforts to raise salaries. Some have raised them 10 per cent, some as much as 25 per cent, and others have raised them higher. I will say that nearly every County Board in the State is raising these salaries of teachers all their financies will possibly warrant."

Georgia

Several bills on teachers' salaries, as well as other educational subjects, were pending in the State Legislature at the time of Superintendent Brittain's letter. The Forty-seventh Annual Report of the Department of Education to the General Assembly of the State of

Georgia gives many interesting facts relative to the salary problem in that State. It gives the following average monthly salaries paid during 1917-18:

Grammar Grades

	1917	1918
Average monthly salary paid white male teachers	$63.00	$70.00
Average monthly salary paid white female teachers	47.12	52.36
Average monthly salary paid colored male teachers	31.61	34.72
Average monthly salary paid colored female teachers	22.73	26.12

High School Grades

	1917	1918
Average monthly salary paid white male teachers	$101.00	$109.75
Average monthly salary paid white female teachers	65.00	70.61
Average monthly salary paid colored male teachers	46.71	51.87
Average monthly salary paid colored female teachers	28.63	31.77

From the same report we learn that "Thousands of the best and most energetic men and women left the school room at the call of business and for much larger salaries." This shows the acuteness of the salary problem in Georgia brought about by the fact that the land is assest at about one-fifth of its value, and that the amount of per capita tax for school purposes is the fourth lowest in the United States. A bill is also pending to provide for prompt payment of teachers without having the salaries which average but a little over $300 discounted. Schools and teachers lose $50,000 annually by having their warrants discounted.

Kentucky

Superintendent Gilbert states that the minimal salary of $50 a month was establisht for first class rural school teachers, and that several city Boards of Education within the State are very materially increasing their salaries. The Board of Education of Louisville, in order to insure a supply of teachers to begin the year, increast the salaries by from 8 to 33 per cent. These increases were graduated inversely according to the salaries received.

Louisiana

Superintendent Harris states that the Constitution was amended in the fall of 1918 in a way to very materially increase the school funds. Much of this increase would go toward the bettering of salaries. A suggestive schedule of salaries for teachers was adopted, which will be used as the basis for the fixing of teachers' salaries for the session of 1919-20. Salaries outlined are minimum, and in perhaps a majority of the parishes the annual salaries paid will range considerably higher. The schedule for elementary grade teachers is as follows:

1. Graduates of standard normal schools: the first year of teaching expe-

rience, $70 a month; second year, $75; third year, $80; fourth year, $85; fifth year, $90; eleventh year and thereafter, $100.

2. Teachers holding first grade certificates, $10 a month less.

3. Teachers holding second grade certificates: $50 a month without any annual increases.

4. Teachers holding third grade certificates: $40 a month without any annual increases.

Mississippi

No legislation has been recently past in Mississippi. Superintendent Bond is hopeful that the next Legislature will more adequately provide for teachers' salaries. He states that

"Some of our Local Boards of Trustees have made $1,200 a year the minimum for grade and high school teachers. There is a tendency to put all such teachers on a twelve months salary basis, giving them thirty days off during the year, and employing them for half time during the rest of the time the school is not in session, to coach all those students that failed to pass on the last session of work."

North Carolina

State Superintendent Brooks reports three educational advances for North Carolina, "The six months minimum school law," "The County Budget" and "The Minimum Salary Law." This law provides that a 10 per cent increase in the salaries of high school teachers is given, with the provision that nothing in this section shall make it compulsory upon the County Board of Education to fix the monthly salaries of high school teachers higher than $75 a month. It also provides that in complying with the requirements that budgets be prepared, that increases should be granted teachers ranging from 25 per cent to 10 per cent, depending upon the work done and certificate held. It was, however, provided that nothing in this section shall make it compulsory upon the County Board of Education to fix the monthly salaries of teachers for any school larger than the following:

1. "For inexperienst teachers, a salary not larger than the average salary of 1918-19 of the teachers in the county holding the same grade certificates.

2. For teachers of successful experience of two or more years holding elementary certificates, $65 per month."

South Carolina

Superintendent Swearingen reports that high school salaries were raised so that the lowest paid high school assistant received $75 per month instead of $55—an increase of 30 per cent. The $75 was increast by $5 for each of the two succeeding years of experience. An Act of 1919 provides for salaries of elementary school teachers as follows:

"An assistant teacher holding a first-grade certificate shall be paid not more than $60 per month; an assistant teacher holding a second-

grade certificate shall be paid not more than $50 per month, and an assistant teacher holding a third-grade certificate shall be paid not more than $40 per month."

"In any district the board of trustees may pay lower salaries in their discretion; but such lower salaries shall always constitute the basis for calculating any deficiency to be made up from the funds provided under this Act. If the salaries paid teachers in any district exceed the salaries herein authorized, the total amount of the excess must be applied by the board of school district trustees, either by private subscription, or by a higher rate of local taxation. Any district running its school longer than seven months must also pay the cost of the eighth month, or of the ninth month, by private subscription, or by a higher rate of local taxation."

Texas

State Superintendent Annie Webb Blanton reports three measures affecting teachers' salaries recently past by the State of Texas:

First—"For the purpose of promoting the public school interests of rural schools and those of small towns, and of aiding the people in providing adequate school facilities for the education of their children, $2,000,000, or such part thereof as may be necessary, is hereby appropriated out of any money in the State Treasury not otherwise appropriated for the school year ending August 31, 1920, and $2,000,000, or such part thereof as may be necessary, for the year ending August 31, 1921, to be used in accordance with the provisions of this Act in aiding rural schools and those of small towns."

Secondly—The prompt payment of teachers without discount, and,

Thirdly—Equal pay for men and women in the State schools of the State.

Virginia

At the legislative session of 1918, the amount appropriated by the State for teachers' salaries was increast about $800,000. Superintendent Hart hopes that the next session of the Legislature will provide local increases to teachers' salaries amounting to approximately 25 per cent.

GROUP C

Illinois

The State of Illinois has a bill pending which will make $700 per school year of 36 weeks the compensation rate at which all teachers in the public schools must be paid. This Act does not apply to any school district levying the maximal amount of taxes authorized by law.

Indiana

Superintendent Hines reports that the multiples for determining the wages of teachers have been increast 25 to 30 per cent. The School Board at Whiting, Indiana, has establisht $1,000 as a minimal salary for all grade teachers, even beginners.

Michigan

No bills were past by the last Legislature of this State, but a very active campaign has been carried on by the State Teachers' Association for the betterment of salaries in that State. A bulletin, "Teachers' Salaries in Michigan," publisht by the State Teachers' Association, has been largely instrumental in improving the salary situation thruout the State. Some of the larger cities, particularly Detroit, have establisht salary schedules very much in advance of past years, while some of the smaller places, such as Monroe, have establisht a minimal salary of $1,000. Considering that the average salary of Monroe was $735, this represents a noteworthy advance.

Ohio

Assistant Superintendent Riegel states that "Boards of Education generally are increasing salaries of superintendents and teachers. In some cases the salaries are double what they were three or four years ago." A bill was under consideration in the State Legislature which would provide a salary schedule for elementary teachers ranging from a minimum of $60 per month to $75 per month, according to the amount of experience, and also providing that all schools should be in session for eight months.

GROUP D

Iowa

The State of Iowa recently past a minimum wage law which, according to Superintendent Deyoe, may be regarded as a decided step in advance for better teachers' salaries in Iowa. This law financially recognizes the differences in amount of preparation. A teacher who has completed a four-year college course and received a degree from an approved college and who is the holder of a State certificate shall receive a minimum wage of $100 per month, and after two years of experience, the minimum wage shall be $120 per month. A teacher who has completed a two-year course in the State Normal School shall receive a minimum of $80, which after two years' successful experience shall be $100. A teacher who has completed a normal course in a normal training high school and has less than one year's successful teaching experience shall have a minimum wage of $65 per month,

which after additional training will be increast to $75 and then $80 per month. A teacher who is the holder of a second-grade county certificate shall receive a minimal wage of $60, which after one year of successful teaching experience becomes $65, while a teacher holding a third-grade county certificate shall receive a minimal wage of $50.

Minnesota

Superintendent McConnell states that "No laws relating to teachers' salaries were enacted by the last Legislature, but salaries have advanst at least 40 per cent over 1914, and at least 10 per cent over last year. The advance has been general thruout the State, and I have not been informed of any action taken by any particular school board."

Missouri

The State of Missouri past a bill which provided a 50 per cent increase for county superintendents and gave serious consideration to another bill which provided material increases for teachers' salaries ranging from $65 to $100 per month. The latter bill, however, was defeated after much favorable discussion thruout the State. There is a general tendency to increase the grade teachers' salaries. St. Louis and Kansas City led in this movement, with increases of approximately 25 per cent to their teachers, whereas we are informed by Rural School Inspector Harrawood that Sedalia, Joplin, Poplar Bluff and Jefferson City increast teachers' salaries from 10 to 20 per cent.

North Dakota

According to Assistant Superintendent George A. McFarland, the salaries paid in the better graded schools were increast to $90 or $110 per month. The salaries of county superintendents were also increast from 50 per cent to 70 per cent, with an additional increase in mileage.

Oklahoma

Assistant Superintendent Collette reports that no bills were past at the recent session of the Legislature affecting the salary of teachers. The State Board of Education, however, authorized a 10 per cent increase in the salaries of those teaching in the State normal schools. "Local Boards of Education thruout the State are increasing the salary for the next school year; I think the general increase would average about 15 per cent."

South Dakota

Superintendent Shaw replies as follows:

"I regret to say that no legislative action regarding teachers' salaries in this State was past at our Legislature which adjourned on March

7th of this year. Teachers' salaries in South Dakota have been increast about 20 per cent over the salaries paid last year, but no legislation concerning the matter was past."

GROUP E

Arizona

No legislation affecting teachers' salaries was past at the last session of the State Legislature. "A bill, however, was introduced, providing for a minimum wage of $1,200, but failed of passage." Superintendent Case reports that some of the local school boards have made increases in salaries as high as 25 per cent.

California

Backt by school organizations all over thte State, a vigorous campaign for increast school taxation and better salaries for California was successfully waged during 1919. It resulted in the passage of a bill increasing the State allowance per pupil from $15 to $17.50. Another bill increast the State apportionment of school funds from a basis of $250 to $350 per teacher, while a third bill provided that the county apportionment should be increast from $13 to $21 per pupil, and fixing $550 as the amount per teacher to be raised by local taxation.

Colorado

Colorado salaries were increast by 20 per cent for teachers in third-class districts, and a minimal salary of $75 per month was establisht for teachers in the first- and second-class districts, according to the report of Mary C. C. Bradford, Superintendent of that State.

Idaho

No laws were past which distinctly establisht standards for teachers' salaries. There is, however, a general movement over the State to increase teachers' salaries, and make them more commensurate with the costs of living. Several of the smaller places, among them Blackfoot, Nampa, Pocatello and others, have establisht schedules which will provide for minimal salaries of $1,000 with liberal maximal salaries above that. A campaign for better salaries is being conducted by Miss Redfield, State Superintendent. Many more cities are expected to meet this standard for the next year.

Montana

Miss May Trumper, Superintendent of Public Instruction, reports that no legislation was past in Montana which directly influenst salaries, with the exception of a bill providing for "equal pay for equal work for men and women." The teachers of Butte, Montana, however, were

successful in securing a $300 increase in the salaries for next year, in addition to a $100 bonus for the salaries of the present year. This will give for Butte a minimal salary of $1,000 for grade teachers, $1,400 for junior high school teachers, and $1,600 for senior high school teachers.

New Mexico

"The salaries in New Mexico for the school year beginning September, 1919, will run from 30 to 40 per cent higher than last year," is the opinion of Superintendent Wagner. Special provision was also made in New Mexico for rural schools and a law was past providing a salary schedule for them as follows:

"The amount which may be expended by any rural school district, where no such graded school is maintained, for all purposes except the construction, purchase, lease, repair or equipment of school houses, shall not during any school year exceed the sum of seventy dollars ($70.00) per month per school room in which a teacher holding a third-grade certificate is employed nor more than ninety dollars ($90.00) per month per school room in which a teacher holding a second-grade certificate is employed nor more than one hundred and ten dollars ($110.00) per month per school room in which a teacher holding a first-grade or higher certificate is employed."

Oregon

Superintendent Churchill reports the passage of a minimal salary bill for the State of Oregon, which makes $75 per school month the legal minimum for any public school teacher. He also reports various increases in the salaries of the teachers in the cities within the State. Noteworthy among these is the increase in the Portland schools, where by a special election on May 10 an increase of $531,000 was voted by the school district of Portland to be spent exclusively in increasing teachers' salaries. This will give each teacher in the service a flat increase of $40 per month or $400 per year over the present schedules, and will make the minimal salary for beginning teachers in Portland $1,200.

Washington

Mrs. Preston writes that Seattle has made a minimum of $1,200 for grade teachers and $1,500 for high school teachers, with maximal salaries of $1,800 and $2,100 for the two divisions. "Tacoma has increast its tax levy four mills in order to meet the increast demand for salaries for its teachers. In fact, all of our first-class districts are meeting the demands and just as many of our second- and third-class districts as can do so."

Wyoming

Mrs. Morton, State Superintendent, says that no bills past the recent Legislature concerning salaries, but "in a number of the coun-

ties of our State there is a uniform arrangement whereby a minimum salary for rural teachers has been fixt. The minimum in three counties is $90 per month, and in Sheridan county the minimum is $100. There seems to be a movement that is spreading over the State to make a provision such as this."

CONCLUSIONS

1. There is nation-wide realization that teachers' salaries are too low, and that adjustments must be made in larger units than the single district or city. Of the 37 States replying to President Strayer's letter, 20 of them have past (within the last two years) laws regulating teachers' salaries, and 7 of the remainder have had bills on this subject under legislative discussion.

2. There is a distinct awakening to the fact that elementary teachers, and more particularly rural elementary teachers, are most in need of immediate financial relief. Not until the rural schools can compete financially with the larger districts is there much hope that they will ever be more than the dumping ground for inefficient teachers or the training schools for city systems.

3. A national consciousness of the part played by the schools during the war, accentuated by the appreciation of the part they are to play in the period of reconstruction, and the crowning realization of their potentiality for good or evil in the period of social and industrial unrest, has made lawmakers all over the country give school legislation a first place on the calendars of legislative assemblies.

4. An ever-growing realization that the results of public education depend in a large measure upon the efficiency of the teachers, has provokt much legislation, resulting in increast standards of preparation for teachers. This has inevitably led to the providing of better salaries as the final means of "enforcing" the added requirements.

5. Recent legislation on teachers' salaries in a great majority of cases has been instigated at least with the cooperation of school men and teachers' organizations, and has been on a much more intelligent and liberal basis. Heretofore, salary laws were too frequently prompted by anything but altruistic motives.

6. Each section of the country is making about an equal *effort* to improve the conditions of its teachers, but they are far from securing equal *results*. An examination of the results accomplisht in some of the States in Group B, in comparison with standards set and paid for in States in the other sections, is one of the most conclusive arguments for *federal aid* to education in the United States.

CHAPTER IV

TEACHING AND THE ECONOMIC SITUATION

Part I.. Economic Aspects of the Educational Emergency

The present emergency in education is a direct outgrowth of the financial exploitation of teachers, and no permanent corrections can be made until teachers' salaries are very materially increast. Other causes for this emergency are given and, when analyzed, prove to be merely statements of the salary problem, in different words, or from a different angle. Other reasons are given, such as inadequate support, inequality of burden, shortage of teachers, and untrained teachers. Inadequate support is a question of salaries since 57 per cent of the money expenses for school purposes in the United States in 1915-16 was for salaries, and it is a higher percentage now. Inequality of burden is almost entirely a question of salary since the big differences arise there rather than in cost of buildings, school supplies, and operating expenses. A serious shortage of teachers does exist and has been an important element in the present emergency, but practically all teachers who have left teaching for reasons other than marriage, ill-health, or old age, did so for positions paying better salaries.

Teachers are untrained, but the graduates of all the public and private normal schools are not more than one-sixth of the new teachers needed each year, and yet very few of the normal schools are carrying their capacity number of students. The rewards of teaching do not encourage the expenditure of time and money in professional preparation. This will also account for the shortness of the teacher training courses, being in most cases only one or two years.

The training of teachers is influenst not only by the prospective lack of salary for the students but also by inadequate support of these normal schools, particularly in the salaries of the normal school teachers. Few States have a salary schedule for their normal schools which will bear comparison with the salaries in the better high schools of the State. As a nation we spend as much per student per year to educate any high school pupil or any boy in a reform school as we do for the training of a teacher in a normal school. We spend nearly twice as much for a pupil in a deaf school, more than twice as much for a college or university student, three times as much for a blind student, and nearly four times as much for the training of a feeble-minded child.[1]

Probably the two reasons why the question of teachers' salaries is educationally paramount at the present time are (1) salaries have not

[1] From Table VIII, Commissioner of Education Report, Vol. II, 1917, page 25.

kept pace with the increast cost of living, and (2) teaching is so poorly paid in comparison with other lines of work that it has suffered tremendously by competition. The opposites of these two statements are frequently claimed to be true and used as arguments against measures for the better support of schools or the increase of teachers' salaries. It behooves all teachers to know *how* true they are, which the comparisons in this part of the chapter will show.

A. Teachers' Salaries and the Cost of Living

Have teachers' salaries advanst, and if so, how much? Table LVII will show that during the last twelve years the average salary for all the teachers in the United States has increast from $381.77 tc $630.64, an increase of 65 per cent—"A tremendous increase! What an ungrateful lot of money-grabbing Croesuses the teachers of the United States must be to have such an increase in salary and still be waging campaigns for more" exclaims the self-pitying and near-sighted taxpayer. What does an increase of 65 per cent mean when based upon such a salary for 1906 as $381.77 ($31.80 a month)?

TABLE LVII

AVERAGE ANNUAL SALARIES FOR TEACHERS (MEN AND WOMEN) IN "STATE SCHOOL SYSTEMS" FOR THE UNITED STATES AND FOR THE FIVE GEOGRAPHICAL DIVISIONS

FOR THE YEARS 1906-07 TO 1915-16*

Year	United States	North Atlantic	North Central	South Atlantic	South Central	Western
1906-07	$381.77	$567.45	$373.86	$ 235.73	$239.59	$535.95
1907-08	414.87	581.36	436.56	232.13	260.04	550.27
1908-09	442.89	648.07	457.07	292.38	293.92	558.31
1909-10	488.20	611.06	468.08	281.88	320.48	576.25
1910-11	466.40	604.04	480.29	303.91	332.60	607.63
1911-12	491.62	651.24	499.18	308.34	345.84	668.46
1912.13	511.86	668.52	523.22	327.19	354.29	709.13
1913-14	524.60	696.25	537.45	328.88	360.06	699.03
1914-15	543.31	727.28	557.78	333.58	366.60	734.00
1915-16	563.08	728.56	569.65	342.39	413.58	797.47
1918**	630.64					

*From Reports of the Commissioner of Education.
**From Estimate of Commissioner of Education, N.E.A. Bulletin for April 1919, pg. 14.

Such a salary is a relic of days when teaching was a side issue to some other occupations, requiring little or no preparation, continuing for intermittent periods of two or three months according to the season and the weather conditions and not expected, in any case, to be a total means of support. It was rather a means for the stay-at-home girl to make a little "ready money" and have in addition the "peace of mind" which is the reward of the missionary and the social worker. Another side of this story is that while the teacher's salary has increast 65 per cent in twelve years, it is not the only thing which has increast. The cost of her schooling, the cost of her clothes, her

room and board, in other words, her entire expenses have by no means been left behind in the race toward higher prices and increast costs. Not only have they not been left behind, but they have been able to so skillfully maneuver for positions that the teacher's salary has been hopelessly defeated by the other competitors in this race.

How much additional preparation can a teacher afford, how much better can she live, how much more optimistic can she be in her teaching even if her salary has increast 65 per cent within the last ten years, when she realizes that within the same period the cost of living has more than doubled so that her 65 per cent increase is in reality almost a 20 per cent decrease.

In this age of economic enlightenment almost every occupation except teaching has learned that there is such a thing as a "standard of living," that this standard of living has a direct effect upon the health, happiness, and efficiency of the worker and his family, that this standard varies by occupations and by localities, that there is a minimal level below which it is socially unsafe to force people to live and lastly, that wages must be considered not from the point of view of actual amounts but in regard to what can be obtained for them.

The keeper of a boarding house in a Western normal school town was heard to remonstrate upon the State's extravagance in the payment of its normal school teachers. She complained that they were paying some of them almost twice as much as they did ten years before that. In that same ten years the price of board in her home had increast from $2 per week to $5. This tendency of juggling school expenditures by comparisons with the past, rather than the scientific forward look which is the basis of all modern budget making, has too long prevailed. School men are, themselves, largely responsible for this attitude. They have practist it and allowed its use on them and their problems until now it has become a habit of the public mind in all school measures. Any means would be justifiable which would break up this habit, and the campaign of education cannot start too soon.

Teachers should realize and they *must* see to it that the people realize that salaries ought to provide for the *coming* year, not the one just past. They must provide also for additional preparation at future intervals, for a standard of living necessary for teachers and for a small margin of saving. The only use of past conditions should be to guide in making this estimate of future needs.

Of what value is an increase in a teacher's annual salary of $20, $22.50, $45, or even $75 or $100 (which range will include 95 per cent of the increases given) when all of this increase, and often more, will be needed for the additional cost of room and board alone?

"During the five-year period between October 1913, and October 1918, food as a whole was 75 per cent higher in 1918 than in 1913."[1] The wholesale price of every article increast 54 per cent or more, while five articles increast over 100 per cent (corn meal 119 per cent, lard 115 per cent, bacon 108 per cent, flour 103 per cent, and pork chops 102 per cent). The close of 1918 found the index numbers for all wholesale prices over 200, an increase of over 100 per cent since 1913, with an average for the year of 196+.

What percentage, or even fraction of a per cent, of the teachers of the United States were receiving in November, 1918, more than twice as much as they were in October, 1913? Or we might be still more modest and ask what fraction of a per cent of the teachers of the country had had increases of salary in that time which had kept pace with the *lowest* percentage of increase for any article of food, namely 54 per cent.

Chart III gives a graphic representation of the mal-adjustment between teachers' salaries and the wholesale prices of "All Commodities" from the years 1906 to 1918. It shows how conservatively teachers' salaries have kept the even tenor of their way, with no regard for the tremendous increase in the cost of living.

Some near-sighted penurious "watchdogs of the public funds" are saying: "Prices are abnormal now and will drop at once. Let the teachers bear their part of the increast cost as a patriotic duty, until things readjust themselves." Why didn't these same people object on the same grounds to the increases given to railroad employes, to the workers in their factories, to the farmers for their wheat? If patriotism consists in being economically exploited, how could these same objectors bring themselves to accepting higher prices for their goods or services? Are we making a wise investment when the teachers of the country are living on such a close margin that statements like the following are common: "I am buying a $50 Liberty Bond each year, so shall not be able to attend summer school until they are paid for." "I put the money for my magazines into War Savings Stamps?"

Martha and Robert Bruere,[2] writing in 1913, say: "We are therefore eliminating from consideration in this book all families whose incomes, either in money or its equivalent, are less than $1,000, because we are convinst that no supplemental expenditure of brain and muscle can enable them to rise to the level of social efficiency." And again: "$1,200 is more nearly correct than $1,000 as the financial minimum for social efficiency." This standard set for 1913 would have to be nearly doubled to meet the need of 1919. Assuming that not all the

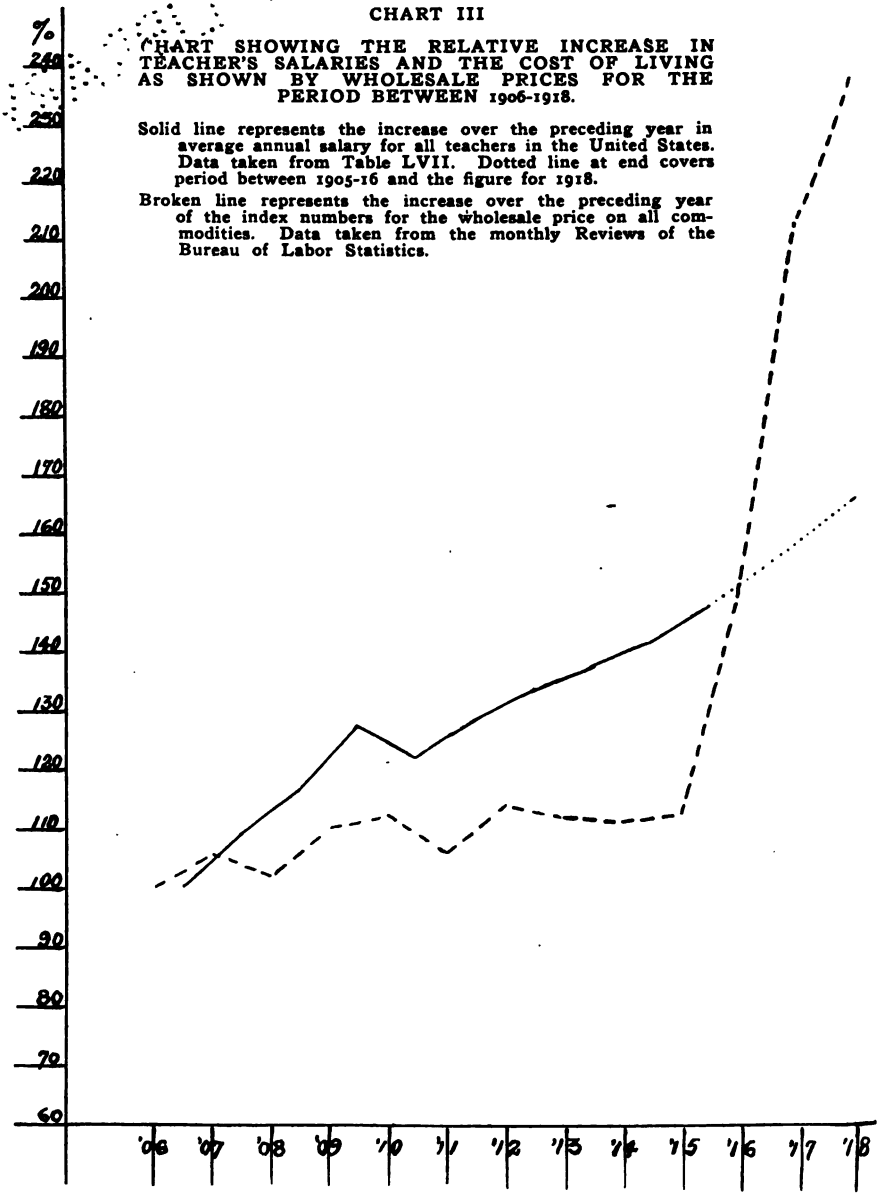
[1] Bureau of Labor Statistics, Monthly Review, January, 1919.
[2] Bruere Increasing Home Efficiency, page 27. Macmillan.

CHART III

CHART SHOWING THE RELATIVE INCREASE IN TEACHER'S SALARIES AND THE COST OF LIVING AS SHOWN BY WHOLESALE PRICES FOR THE PERIOD BETWEEN 1906-1918.

Solid line represents the increase over the preceding year in average annual salary for all teachers in the United States. Data taken from Table LVII. Dotted line at end covers period between 1905-16 and the figure for 1918.

Broken line represents the increase over the preceding year of the index numbers for the wholesale price on all commodities. Data taken from the monthly Reviews of the Bureau of Labor Statistics.



budget items need to be increast at the same rate as food, rent, etc., it would be a safe approximation to say that these figures, instead of being $1,000 and $1,200 in 1918-19, would be at least $1,800 and $2,000.

This is setting a standard which many will call too high, but it involves the social efficiency of a family and not of a single teacher. For several reasons we must begin to think more in terms of a compensation for teachers which will permit the support of a family. The holding of any other position in the face of the growing tendency for "equal pay for equal work," much strengthened by the war, would mean the automatic elimination from the work of teaching of men, particularly men desirous of family responsibilities.

Omitting the question of social efficiency—a term as yet indefinite and much debated as an aim of education and as a standard of living—a teacher *can live,* i. e., remain physically alive, on much less than $1,800, or even $1,000—the tentative standard set by the N. E. A. In fact, this *feat* is being yearly done by approximately 20,000 teachers on less than $500 a year, while several thousand of these jugglers of human destiny do it on less than $300. Unless this last figure is supplemented by some other form of work, these teachers live on $5.75 a week. Imagine the budget of such a teacher. Start with $5.75 for the week, provide for board, room rent, laundry—the items which must be met every week—and plan to save enough for clothes, shoes, the trip or trips to the county institute, a newspaper, magazines, dentist and doctor bills, and set aside the remainder for a quiet rest during part of the summer, or a summer course at the State normal school, an occasional trip to some nearby spot of historic, scenic, or civic interest, a few small donations to friends, church, or charity, and some margin of savings to be invested in a Liberty Bond or deposited in a savings bank.

Long before the above, none too adequate, list of expenses are met in this imaginative budget we are made to realize that these thousands of teachers in all probability are compelled to prepare their own meagre and monotonous meals, they do all their own laundry, make many of their clothes, and wear what they do have until they are noticeably behind the mode and worn to shabbiness. They will have to have sound teeth and good health and forego all sources of professional advancement or recreation. They must suffer the constant mortification which comes from inability to assist with the support of religious and social activities in the community and deny themselves the privilege of forming the "thrift habit of saving" which they are expected to teach.

The National War Labor Board, in an exhaustive inquiry into the cost of living in Schenectady, set $15 as a minimal weekly amount

upon which a girl can live. About 60 per cent[1] of the teachers of the country are teaching this year for less than the $780 which this *minimum* calls for, to say nothing of the expenses which a teacher must meet which are not necessary for the worker in a factory.

Only about 20 per cent of the teachers of the United States receive a salary of over $1,200, the minimum for social efficiency set in 1913, and if this were raised to $1,500 for 1918-19, there would be but about 6 per cent able to reach it, while if it were raised to $1,800 it would reduce this percentage to but 2½ per cent.

In no other work is the *maximal* efficiency of the workers more necessary than in teaching, and yet by national niggardliness we make it impossible for about four out of every five of our teachers to reach even the *minimum* of efficiency, with the maximum far out of reach even for most of these more fortunate few. The American people are expecting more of teachers now than ever before and many of these expectations are along lines which cost teachers more to meet than at any previous time, and yet teachers' salaries are lower in purchasing power than they were 12 years ago. The answers received from teachers at work under present conditions[2] indicate that the *median* percentage of salary used for *necessary expenses* is very nearly 100 per cent, of which only about 15 per cent was spent on expenses other than "personal living expenses." The condition is shown in another light when total expenses are computed from the cost of "room and board" as given by the superintendents in 310 cities, and compared with the *maximal* salaries offered in the same cities (Table XLIII). In 48 per cent (practically one-half) of the cities reporting, the teachers would be compelled to spend 100 per cent or more of their salaries in order to live. This means that no matter how long the teachers in such cities continue in the work, no matter how much extra training they take, they cannot hope for a maximal salary which will defray expenses without cutting down the standard of living. The condition would be infinitely worse if we assumed that teachers should have the same margin for savings on their investments which we take for granted in all other investments.

Salary schedules for teachers must be revised and in the light of present demands upon teachers and the present cost of living.

B. Are Teachers Better Paid than Other Workers?

There are several reasons for the popular idea that teachers are "well-paid holders of easy jobs, with easy hours, and long vacations."

a. Teachers' salaries are usually divided into eight or nine install-

[1] An estimate based on the Distribution of salaries for 1918-19, as given in Table IV, page 15.

[2] "Studies 7a and 7b" in Chapter II, page 73.

ments and consequently seem from 25 to 33 1/3 per cent higher than they really are.

b. Salaried people are always adjudged better off by wage earners, because $75 a month sounds better than $18.75 a week or than $3.12 a day.

c. Six hours a day seems to many people to be a small number of working hours. This compares very favorably with the hours kept by business men, lawyers, bankers and others, and with the growing tendency of several of the labor unions to advocate six- and even five-hour days. But when from two to four hours is added for "home work" in preparation for the work of the next day (ever a new situation to the progressive teacher), the teacher's day becomes longer than that of most workers.

d. Teachers have long vacations, but living expenses go on during those vacations just the same and often increase if the teacher spends part of the time in self-improvement. If she has to turn to some other form of work it isn't a vacation, and if she doesn't she usually begins the school year in debt, and so reduces her income for the next year.

e. Teaching has never entirely recovered from the idea that it is a good occupation for the local boys and girls to follow who can board at home and consequently work for less salary.

These and other points of view give an erroneous idea of the adequacy of teachers' pay. Assuming that teaching is a profession (the amount of training required does not as yet justify this assumption, but the tendency is decidedly in that direction), it is interesting to compare the salaries of teachers with other professions. The average salary for all teachers in the United States in 1918, according to the Commissioner of Education's report, was $630.64. The median salary of 76,775 teachers in elementary, intermediate, and high schools in 320 cities over 10,000 population in 1918 was only $869.34.[1]

The ministry is seldom, if ever, cited as a highly paid profession, and yet the median salary for Episcopal clergymen in this country in 1918 was $1,218.50,[2] between $400 and $500 more than the median salary for teachers, without considering the additional value of a free parsonage.

The Massachusetts Institute of Technology took a census of the three classes of 1893, 1894, and 1896 ten years after graduation and found the median salaries to be $3,410, $2,430, and $2,540.[3] Almost no salary schedules, even for high-school teachers who have as much or more training, provide for a maximum salary at the end of ten years equal to the lowest of these median salaries.

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[1] N. E. A. Bulletin on Teachers' Salaries in 1918, page 58.
[2] Preliminary Report of the Joint Commission on the Support of the Episcopal Clergy.
[3] Technology Review for 1915.

TABLE LVIII

INCOME STATISTICS OF GRADUATES IN ENGINEERING FROM A WESTERN STATE UNIVERSITY*

Years Out of College	Number Reporting	Highest Income	Lowest Income	Average Income	Per Cent Above Average	Per Cent Below Average
1	166	$ 4,000	$ 150	$ 884	40	60
2	152	7000	400	1,115	28	72
3	136	4,000	300	1,225	34	66
4	119	4,500	600	1,379	31	69
5	94	5,000	420	1,498	32	68
6	80	4,000	600	1,596	48	52
7	73	3,400	720	1,697	48	52
8	63	5,000	650	1,786	47	53
9	53	7,000	840	1,996	38	62
10	50	8,300	1020	2,296	30	70
11	43	10,300	800	2,530	28	72
12	34	13,200	800	2,819	26	74
13	35	20,000	900	3,127	21	79
14	30	40,000	900	3,927	13	87
15	31	33,000	1,000	3,884	13	87
16	28	21,800	800	4,252	11	89
17	25	27,500	**——	3,440	16	84
18	23	37,000	1,000	4,671	13	87
19	21	27,000	1,500	4,663	19	81
20	17	23,000	2,000	5,946	24	76
21	17	33,000	2,100	7,734	29	71
22	16	42,500	2,100	8,006	19	81
23	16	46,000	2,000	7,687	25	75
24	13	33,500	2,100	8,172	23	77
25	10	14,800	2,100	4,630	30	70
26	7	13,500	2,100	4,671	14	86
27	5	19,700	1,500	6,340	20	80
28	5	22,500	1,500	6,980	20	80
29	3	4,200	3,000	3,567	33	67
30	3	4,500	3,000	3,833	67	33
31	3	4,500	3,000	4,075	75	25
32	3	4,500	3,700	3,983	33	67
33	2	5,000	3,700	4,350	50	50
34	1	5,000	5,000	5,000	0	0
35	1	5,000	5,000	5,000	0	0

*From Engineering News, Sept. 9, 1915, p. 505.
**Indefinite loss reported for this year.

The class of 1908 of the same school took a canvass of its members in June, 1910—two years after graduation—and from 126 replies found that the median salary was $1,206. A year later, from 141 replies the same class had a median salary of $1,409.

Table LVIII, showing the income statistics of graduates in engineering from a Western State university, tells a story very unlike the one which a similar table for teachers would tell. In this table it is easy to see a high positive correlation between salary and experience, with an average annual increment of $200 for each of the first fifteen years.

Table LIX gives the average annual earnings of medical graduates of Harvard University since 1901 by years after graduation, as well as the earnings of the graduates of its law courses according to the number of years out of college. The median salaries for teachers in Section A, which would correspond most nearly with the salaries of Harvard graduates, is $823 for elementary, $999 intermediate, and $1,139 high school.

TABLE LIX

AVERAGE ANNUAL EARNINGS OF MEDICAL GRADUATES OF HARVARD UNIVERSITY.*

Years of Practice	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910
1	$866	$ 787	$ 541	$ 362	$ 625	$ 502	$ 355	$ 533	$ 425	$1237
2	827	1089	790	995	773	826	588	1250	874	1083
3	1181	1539	1412	1295	995	1262	1353	1025	1370	1578
4	1505	1694	1720	1566	1559	1765	1963	1575	1632	1835
5	2027	1556	1966	1981	1818	2359	2347	1847	2150	
6	2341	1837	2333	2277	2347	2997	3202	2360		
7	2527	2161	2654	2967	3043	3650	3545			
8	3003	2491	3155	3042	3337	4332				
9	3560	2900	3616	3604	4500					
10	3524	2963	4135	4535						
11	3885	3691	4604							
12	4422	4130								
13	4680									
Max. No. of Men.....	38	39	29	39	33	26	29	29	25	26

*From Training Rewards of the Physician "Cabot."
Figures compiled from Harvard University in 1914 on the average annual earnings of Lawyers and Doctors.

Years out of College	1	2	3	4	5	6	7	8	9	10
No. of Replies (1).....	694	609	497	411	317	249	162	112	62	40
Law-ave. earning.....	664	1110	1645	2150	2668	3118	3909	4426	5321	5325
Med.-ave. earning.....	623	909	1301	1681	2005	2410	2935	3227	3636	3789

(1) No. of replies only for lawyers.

Chart IV gives the average yearly compensation of 4,650 members of the American Society of Civil Engineers by geographical location and in five-year periods of experience. It makes an interesting but not very cheerful comparison with the situation shown in Table VIII, showing the median salaries of different sections of the United States.

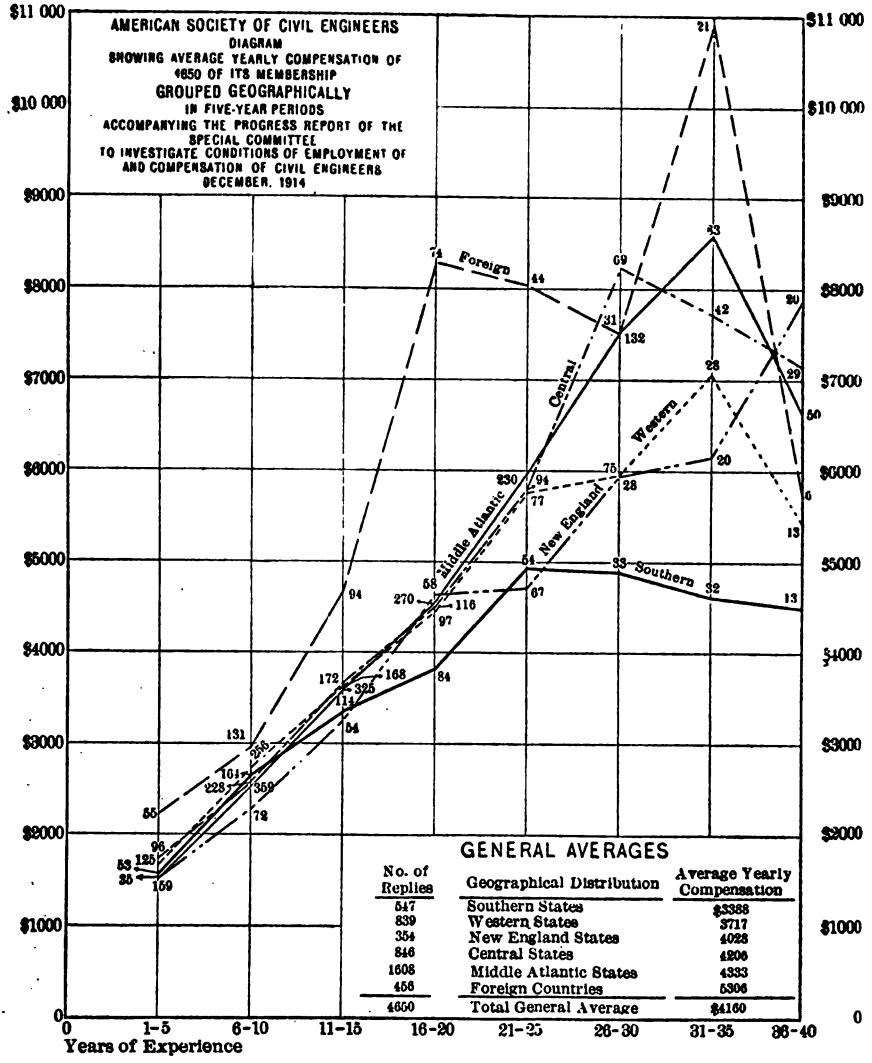
The discouraging contrast presented by these figures from other professions would be softened, we are told, when we compare teachers with the workers outside of the professions. This is in a way as unfair to teachers as the other comparison, since in this comparison we shall have to disregard the thousands of teachers who are sufficiently trained to be called professional.

Table LX shows the union scale of wages in a number of occupations in the larger industrial cities in each of the geographical regions. The cities were selected by taking the data for the first two cities reported in each section and may be considered typical, since the unions tend to standardize the wage and so offset industrial differences or differences in location.

Comparing the average[1] wages from Group C, since they are below the median and consequently conservatively safe, with the salary

[1] Average found for each item for the two cities representing the group.

CHART IV



of elementary teachers, it is seen that it is worth, per year, $394 more to carry bricks than to train children, $363 more to mould dough for bread than to mould boys and girls into citizens, $890 more to hammer hot iron than to hammer ideals, and $1,024 more to build frameworks for buildings than frameworks for characters. These are all occupations requiring relatively little training. Most of them are learned by a pay-producing apprentice system, which is much shorter in duration than the 6 to 8 years above the elementary school which

TABLE LX

UNION SCALE OF WAGES IN OPERATION IN CERTAIN SELECTED INDUSTRIAL CITIES IN DIFFERENT SECTIONS OF THE UNITED STATES.*

Occupation	Annual Salaries**									
	A		B		C		D		E	
	Boston Mass.	Buffalo N. Y.	Atlanta Ga.	Baltimore Md.	Chicago Ill.	Cleveland Ohio	Saint Louis Mo.	Minneapolis Minn.	Denver Colo.	Los Angeles Calif.
Head Bakers	$1248	$1248	$1560[a]	$1560	$1300	$1040	$1222	$1560	$1560	$1352[d]
Carpenters	1373	1287	1248[b]	1264	1144	1373	1186	983	1287[c]	1872[d]
Glaziers	1040	1287	1602[a]	1053[e]	1659	1258	1430	1498[f]	1373	2059
Compositors (English)	1248	1144	936	1092	1544	1560	1516	1348	1700	1560
Machine tenders (Printing)	1352	1586	1718[a]	1456	1612	1560	1515	1348	1700	1560
Bricklayers	1830	1716	1560	1716	1716	2059	1945	1716	2288	1716
Hod Carriers	972	1373[g]	1144[e]	1287	1144	1258	1258	930[h]	1287	1144
Inside Wiremen	1602	1602	1373	1747	1859	1859	1716	1573	1888	1560
Lathers	1560	1560	2002[b]	1716	1825	1947	1716	1430	1716	1287
Plumbers	1716	1573	1573	1573	1716	1859	1859	1573	2002	1716
Structural Iron Workers	1830	1602	1716[a]	1716	1602	2059[j]	1830	1573	1716	1560
Blacksmiths	1697	1487	1544	1697[i]	1697	1697[j]	1697	1697	1298	1872
Machinists	1697	1716	1697	1716	1945	1945	1716	1697	1697	1560
Median salary of elementary teachers in these sections	823		773		807		961		1132	
Median salary of intermedia e teachers in these sections	999		832		889		962		1000	
Median salary of high school teachers in these sections	1139		1036		1107		1273		1559	

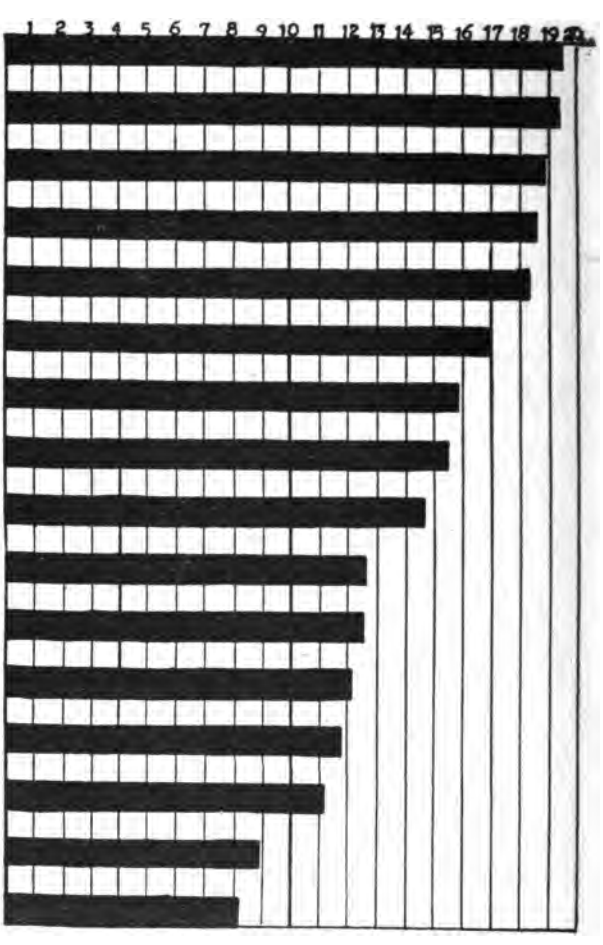
*From Monthly Labor Review of U. S. Department of Labor, Sept., Oct., Nov., Dec. 1918, and Jan. 1919. Teachers' salaries from N. E. A. Study 1919.

**Annual salaries obtained by multiplying weekly wage by 52.

a. Dallas, Tex.; *b*. Houston, Tex.; *c*. Salt Lake City, Utah; *d*. Butte, Mont.; *e*. Memphis, Tenn.; *f*. Kansas City, Mo.; *g*. Philadelphia, Pa.; *h*. St. Paul, Minn.; *i*. Cincinnatti, Ohio; *j*. Little Rock, Ark.

CHART V

CHART SHOWING COMPARISON OF TEACHERS' SALARIES IN SECTION "C" WITH THE UNION SCALE OF WAGES FOR CERTAIN OCCUPATIONS IN THE SAME SECTION, AS INDICATED BY THE AVERAGE OF THE WAGES PAID IN CHICAGO AND CLEVELAND.



1. Section C includes Ohio, Ill., Ind., Mich., and Wis.
2. Taken from Table LX.

are demanded of teachers in most of our cities and many of our States. The longer preparation demanded of teachers is also wholly a period of expense, since it is becoming so exacting of time that it is relatively impossible to follow any gainful occupation during the period of preparation.

The Department of Labor made, during 1918 and 1919, a very [illegible]ro investigation of the living conditions of the workers in ship-

building cities over the United States.[1] These cities included four of the five geographical districts used in this salary study and so furnish an accurate basis for comparison. Except in the Southern section, the average salaries do not show much variation, due, undoubtedly, to the effect of government regulation. These salaries, while they cover the expenses of families, represent the earnings of individuals and are higher in all cases by from $300 to $650 than the median salaries for elementary teachers, and higher by $250 to $350 than the median salaries of high-school teachers in all sections except the far western. The average for all these workers is $1,411, more than double the average salary for teachers of the United States.

Comparing this average with the average salary for teachers in cities of over 100,000 and between 50,000 and 100,000 population, since a majority of the cities used in the shipbuilding study fall in these classes, we find that the ship-yard worker received $475 (51 per cent) more per year than the elementary school teacher. The $1,411 average salary for ship-yard workers is only $104 less than the median salary for high-school teachers in cities of over 100,000 and $129 more than the median salary for high-school teachers in cities between 50,000 and 100,000. The teachers in these high schools have spent a minimum of eight years above the elementary grades, representing an investment in time and money of $10,000 or $15,000, while many of the ship-yard workers did not finish the elementary school, with a vocational training period less, on an average, than one quarter as long as that of the high-school teacher.

The investigations of the Railroad Wage Commission are particularly significant for comparison with the economic situation of teachers. There were over two million workers included in the different branches of railroad service and their work was very essential to the successful carrying on of the war. Consequently when the problem of adequate pay for the railroad workers was presented for settlement it was necessary that the matter be thoroly investigated and a settlement based on justice and sound economics be made. The report of the Railroad Wage Commission gives the results of a careful study of wages and the cost of living, and contains much which is of interest to teachers. The average annual salary for teachers in the United States in 1918-19 is $630.64.[2] The average annual salary actually earned by all employees of all Class I railroads in the United States during 1917 was $1,006,–$375, or 60 per cent more than teachers received a year later.[3] In order to make them more comparable in point of time, the average annual salary of these railroad employees

[1] Table XLI, page 112.
[2] Report of the Bureau of Education, N. E. A. Bulletin, April, 1919, page 14.
[3] Report of the Railroad Wage Commission, page 100, April 30, 1918.

was calculated to be $1,137 for 1918,[1] provided the same number of men were employed for the year and at the rate they were receiving December, 1917. This is $500, or 79 per cent more than the average for teachers. The true comparison has not yet been given, for there is the further consideration that the last figure does not include the increase in wages given during 1918, which in many cases would cause the 79 per cent to become more than 100 per cent in excess of the average salary of teachers for the country.

If the workers in the 16 lowest paid branches of the railroad service in 1918,[2] shown in Table LXI, are compared with teachers in 1918, we find, when their 1915 wages are increast according to the scale of increase[3] adopted by the Railroad Wage Commission, only two groups receiving less than $700 a year, viz., "messengers and attendants" and "section men." These groups are $43.40 and $61.52 higher than the average salary for all teachers. Where will you find people who believe that teachers, who should represent a maximum of professional training in order to do their work well, should be compared with these two groups which represent work calling for about the minimum of necessary preparation, or even intelligence to any great degree? Moreover, they have a membership recruited largely from boys, cripples, and old men for the one, and from illiterates and immigrant or cheap imported labor in the other. Thousands of these workers have not completed the elementary school.

TABLE LXI

TABLE SHOWING ADVANCE IN SALARY FROM 1915 TO 1919 IN THE SIXTEEN LOWEST PAID BRANCHES OF THE RAILROAD SERVICE.*

Occupation	Salary Dec. 1915		Salary Dec. 1918.	
	per month	per year	per month	per year
1. Clerks below $900 p. a. (except telegrapher clerks)	$54.17	$650.04	$77.55	$930.60
2. Messengers and attendants	36.17	434.04	56.17	674.04
3. Mechanics' helpers and apprentices	50.39	604.68	72.60	871.20
4. Section men	37.68	452.16	57.68	692.16
5. Other unskilled laborers	46.44	557.28	67.21	806.52
6. Other men in const. gangs and work trains	42.88	514.56	62.88	754.56
7. Station service employees**	50.22	602.64	72.60	871.20
8. Yard switch tenders	59.99	719.88	84.60	1015.20
9. Other yard employees	51.45	617.40	73.70	884.40
10. Enginehouse men	56.58	678.96	80.37	964.44
11. Crossing flagmen and gatemen	39.59	475.08	59.59	715.08
12. Drawbridge operators	55.33	663.96	78.96	947.52
13. Floating equipment employees	54.61	655.32	77.55	930.60
14. Policemen and watchmen	59.15	709.80	84.60	1015.20
15. Other transportation employees	52.00	624.00	73.70	884.40
16. All other employees	50.53	606.36	72.60	871.20

* From Report of the Railroad Wage Commission, April 30, 1918. Data for 1915 pg. 98; for 1918 pg. 20.

**The following are excluded from this classification: Clerks, $900 p. a. and upwards; Clerks below $900 p. a.; Telegrapher clerks; Agent telegraphers; Station agents (non-telegraphers); Station masters and assistants; Policemen and watchmen.

[1] Report of the Railroad Wage Commission, page 102, April 30, 1918.
[2] Railroad Wage Commission, page 98, April 30, 1918.
[3] Railroad Wage Commission, page 20, April 30, 1918.

thousands are unable to read or write, and tens of thousands cannot speak the English language and have to be supervised by one of their own nationality, and yet they are better cared for financially than the teachers of the nation.

The Pullman porter who during 1917 received $40 a month and the bonus and extra salary from the company, had a salary of $568. This was increast by "tips" and reduction on meals until in many instances these men were receiving compensations amounting to upwards of $1,000—better wages by two or three hundred dollars than 400,000 teachers received during the same year.

TABLE LXII

NUMBER OF INCOME RETURNS FILED FOR 1916 BY CERTAIN OCCUPATIONS COMPARED WITH THE TOTAL NUMBER OF PERSONS ENGAGED IN SUCH OCCUPATIONS, AS LISTED IN THE CENSUS OF 1910.*

Occupations	No. of returns filed in 1916	No. of persons as per census of 1910	Per cent filing returns
Architects	1,419	16,613	8.54
Authors, editors, reporters, etc	2,529	38,750	6.53
Clergymen	1,671	118,018	1.42
Engineers, civil, mining, etc	6,628	58,963	11.24
Lawyers and judges	21,273	112,149	18.97
Medical profession,—physicians, surgeons, oculists, dentists, nurses, and others	20,348	291,942	6.97
Public service, civil	2,992	382,138	.78
Public service, military	5,459	77,153	7.08
Theatrical profession,—actors, singers, musicians	914	167,607	.55
Teachers,—kindergarten to university, and school and college officials	2,919	614,905	.47
Agriculturalists,—farmers, stockraisers, orchardists, etc	14,407	6,047,615	.24
Real-estate brokers, agents, and salesmen	6,146	125,862	4.88
Stock and bond brokers	2,839	13,729	20.68
Brokers, all others	7,479	36,016	20.77
Commercial travellers	12,274	268,522	4.57
Insurance agents and solicitors	7,243	88,463	8.19
Lumbermen	1,319	12,263	10.76
Manufacturers	23,631	235,107	10.05
Merchants and dealers, storekeepers, jobbers, commission merchants etc	59,363	1,246,077	4.36
Mine owners and operators	2,554	14,287	17.88
Saloonkeepers	1,311	68,215	1.92
Theatrical business,—owners, managers, etc	811	31,418	2.58
Alll other business	18,605	101,868	18.26

*Treasury Dept., U. S. Internal Revenue, Statistics of Income, 1916, pg. 7

Table LXII, showing the number of income returns filed for 1916 by certain occupations, compared with the total number of persons engaged in such occupations as listed in the census of 1910, shows from another angle whether teachers are overpaid in comparison with other occupations. The number filing returns indicates the number who had for 1916 an income of $3,000 or over. Only one class has a smaller percentage filing income returns than teachers, and that is the "agriculturalists—farmers, stockraisers, orchardists, etc." This is explained by the fact that so much of the farmer's income is in growth of stock, aging of trees, improvement of the land, and so little of it in money transactions; that they receive in "economic value"—food consumed, articles exchanged for—incomes in excess of estimates which are based entirely on money deposited and spent.

According to these returns the chances that you—a teacher—might earn an income of $3,000 or over are about 1½ times greater if you should become an actor, 1¾ times greater by entering public civil service, 3 times greater in the clergy, 4 times greater for saloonkeeping, 5 times greater in the theatrical business, 9 times greater in storekeeping, commercial traveling or real-estate agency, 14 to 20 greater in publishing, medicine, military service, and insurance agents, and from 20 to 44 times greater in *"any other* occupation" of those making income returns. What a "pull away from teaching" facts such as these must have upon the ambitious man and woman, and how little "pull toward teaching" the people of this country are willing to give in the shape of adequate salaries!

The following wage scale when put into a yearly wage makes the median salary for elementary teachers in New York City $1,279 seem at least as small as it really is.

NEW WAGE SCALE[1]

Prepared by Building Trades Employers' Association

The latest scale of wages issued by the Building Trades Employers' Association follows:

Asbestos Workers, Insulators	$6.40
Bricklayers	7.00
Carpenters, all Boroughs	6.00
Cement Masons	5.60
Composition Roofers, Waterproofers	4.75
Elevator Constructors	6.80
Electrical Workers	6.00
Hoisting Engineers	6.50
House Shorers	5.00
Housesmiths, Structural	7.00
Housesmiths, Finishers	6.40
Marble Cutters and Setters	6.00
Marble Carvers	6.50
Metallic Lathers	6.00
Mosaic Workers	5.50
Painters	6.00
Plasterers, Brooklyn and Queens	7.00
Plasterers, other Boroughs	6.50
Plumbers	6.00
Sheet Metal Workers	6.00
Slate and Tile Roofers	6.50
Steamfitters	6.00
Stone Cutters	6.75
Stone Setters	7.00
Tile Layers	6.50

[1] From the New York Times, May 18, 1919.

The lowest of these wages provides a salary which is $207.75, or 16 per cent, *more* than the median salary for elementary teachers, while the wage for bricklayers, housesmiths, plasterers, and stone setters is $812 (63 per cent) *more* than the teachers.

LABORERS AND THEIR HIRE [1]

Some Odious Comparisons with the Earnings of Educated Folk

In our most expensive New England city, a decade ago, drivers of wagons or carts which transported coal from its storage yards to the sidewalks of the dwellings where it was to be burned workt ten hours a day, with Saturday half-holidays from April to October. They received from $12 weekly for a driver of one horse to $14 weekly for the driver of a three-horse truck.

If the schedule of hours and wages which the drivers now propose—and propose to enforce—for the eleven months beginning May 1, 1919, goes into effect, drivers will receive from $24 to $30 for a week of substantially forty-four hours. That is, they will work eight hours a day except on Saturdays, when the day will end at noon. Ten holidays a year will be recognized, on which the men will rest at full pay, or will work at double pay, the same being true of Sundays. Overtime work in general will be paid at the rate of time and a half.

A coal driver of the highest class in Boston, then, will receive a salary of $1,560 a year for working about as many hours a day as the average office worker, for less time than most teachers are required to give. Overtime might easily add to this the $140 necessary to bring it up to $1,700 a year. If we speak in terms of remuneration, we shall no longer speak of the man who drives the coal wagon with anything but respect. As for "coal heavers," their wages have experienst a similar advance, and they get $24 a week instead of the $9 they received twenty years ago.

Comparisons, with their damnable iteration, are still necessary. The man who, after eight to ten years of continuous study above the so-called common school grades, graduates from the university, may fortunately secure a position as instructor in his college at $1,250 a year, this being on a new and "modern" schedule. If he is not satisfied with that remuneration he may take a six weeks' course in chauffeuring, and get a position at the wheel of a coal truck, which will pay him $1,500 and possibly $1,700 a year. Or, if he is an idealist, he may study three years longer and receive as a minister of the Gospel a salary of $1,000 or $1,100 a year.

This reprint from the Hartford *Times* appeared in the New York *Times of* May 18, 1919. During the present year many articles and editorials calling attention to the financial needs of teachers have appeared in the leading newspapers of the country. The *Pictorial Review,* the *Literary Digest,* the *Independent,* the *Nation* and others featured articles on this subject and widely advertised them. The fact that these important moulders of public opinion are interested in the schools and because of that interest, concerned about the pay of teachers, gives evidence that the financial exploitation of teachers by

[1] From the New York Times, May 18, 1919.

an unthinking, because uninformed, public is about at an end. The purpose in making comparisons with wage earners in other fields of work is to show that teaching is not so financially attractive as many lines of work requiring almost no preparation. Some people have been trained to think that there are other rewards to teaching which compensate for the enforced poverty which it imposes. This does not take into account the elements of ambition and social pride—legitimate incentives to progress. It is not always a matter of whether a teacher can live upon the salary paid, but whether this same individual can live as well and support his family as well on that salary as he would be abe to do in some other work. It is the answering of this question in the negative, so many times, which takes out of teaching the ambitious and progressive man or woman—the ones who should above all others be kept in the work, if possible.

When the salaries of teachers are raised to a place where the men and women who prepare for the work can be happy in it, proud of it, freed from constant financial worry and able to pay their share of the social and civic activities of the city in which they work, then, and only then, will teaching attract the kind of men and women who should and can instruct the citizens of tomorrow.

From an extensive study of statistics obtained from a typical New York City Draft Board,[1] it was found that elementary teachers in New York City are paid practically the same wage as butchers, chauffeurs, clerks, machinists, tailors and waiters, almost none of which require any special preparation, and in fact, the returns would indicate that a majority of the followers of these other lines of work have not completed the elementary schools.

It is further shown that the financial rewards of becoming an actor, an engineer, a lawyer, a manager, a manufacturer, merchant or salesman are very much greater than those of teaching; in fact, the median salaries for actors, lawyers, managers and manufacturers are in excess of the median salaries even for high-school teachers,—the best paid high-school teachers in the United States. These figures would be even more disparaging to teachers if the earnings for the men of the first and second draft had not been taken one and two years respectively before the salaries of teachers.

These data also showed a rather consistent advance in salary with increase in age except for certain occupations where age affects the limit of maximal efficiency, such as laborers, chauffeurs, clerks, etc.

There is a stronger tendency for salary to increase with increase

1 Local Draft Board 135, New York City. Dr. N. L. Engelhardt, Chairman. Permission was obtained from Provost Marshal General Crowder to use the data providing that it should be taken in such a way that no individual could be identified. Over 2000 questionaires, selected at random from both registrations, were used in the study.

in the number of years of schooling. There is also a very noticeable break with the groups receiving salaries over $2,000, in regard to the amount of schooling. In such groups, the median amounts of schooling are consistently over ten years, showing that even two years of high school training is a good financial investment.

If individual cases are considered, rather than the medians of groups, it is readily seen that the range of salary for the different occupations is much greater than for teachers. A stable sweeper earns $1,600 a year, a newspaper route man $1,750, a riding teacher $1,800, a bootblack $2,000, a waiter $2,300 plus tips, a junk dealer $2,500 and a bartender $3,000 plus tips. None of these men have more than an elementary education, and three of them had only four years of schooling. These are not typical of the groups, but show possibilities of financial reward which are not available to the large majority of elementary teachers. From these results it is evident that in New York City the teachers are not paid as well as the followers of other occupations with less training. Even tho New York City has done so well in the salaries paid its teachers, in comparison with salaries paid elsewhere, it, nevetheless, pays them relatively little when compared to the schedule of pay which exists for other work in the city. This part of the study makes evident the principle that salary schedules should be adjusted to the cost of living in the particular locality.

This is a principle which has not been consciously used in establishing schedules of pay for teachers and yet is one which can not be ignored by any city without putting a serious handicap upon that city in its competition for better trained teachers.

CONCLUSIONS

Part I—Economic Aspects of the Educational Emergency

1. The present educational emergency is traceable in practically all of its aspects to the insufficient salaries paid to teachers thruout the country.

2. The cost of living has more than doubled in the last three years, while the increases in teachers' salaries for the United States in the same time has been about 12 per cent. As a consequence, nearly half the teachers of the country are compelled to spend more than their salaries.

3. Teachers, as well as other salaried workers, have not had their salaries increast in anything like the same degree that other workers have. Consequently, teachers are constantly being forced to a lower standard of living and a resulting lower standard of efficiency, because they can not meet the higher demands for rent, food, clothing, books, etc.

4. From various studies of budgets for many occupations in relation to the cost of living, it is estimated that a minimal salary of $1,200 should be establisht for the entire country, and paid on the basis of twelve months. Too many teachers are living below the margin of efficiency, when hundreds of them returned their questionnaires annotated with remarks such as: "I work in a

drug store during summer," "I do house work for my room and board," "I take in sewing to meet expenses," "My summer expenses are paid by my family," "I can't save enough money to go to summer school."

5. Teachers are paid much less than the members of other professions—ministry, law, medicine, engineering, etc. The median salaries are not only larger, but the range of salaries is very much greater, thus offering more promise to the capable, the hard-working and the ambitious individual in the professions. This is lacking in teaching.

6. Teachers are paid much less than a great many of the unskilled laborers whose preparation is very much shorter, and whose expenses for "professional upkeep" are very much less. Existing salaries paid to teachers can be said to almost place a penalty upon adequate preparation, since there is no opportunity for an adequate return upon the investment of time and money necessary to the securing of that preparation.

7. A teacher's work is most effectively done when she is in good health, free from worry, able to participate in the community activities, and when she has the social respect of the community. These things make her a leader, a moulder of citizens, a creator of ideals, and yet practically all these elements of success are denied a majority of teachers by the insufficient salaries paid.

8. New York City, which pays relatively high salaries when compared with other cities, in reality pays its teachers no better than the workers in many of the unskilled occupations.

9. The study of the salaries of the 2,015 draft registrants shows that there is in other lines of work an increase in salary in direct relation to an increase in age, and also in relation to the increase in the amount of schooling received.

10. The additional salary received per year of increast age is much less than the additional salary received per added year of schooling.

11. Occupations which demand additional preparation, with the exception of teaching, received higher median salaries than those where education beyond the elementary schools is not essential.

CHAPTER V

SALARY SCHEDULES

The principle of fixing a schedule of salaries for teachers is not a new one in education, either in European countries or in the United States. Any extensive use, however, of salary schedules is a development of the last 30 years. Thomas W. Bicknell, President of the National Education Association, advocated in his presidential address at the meeting of the Association at Madison, Wisconsin, in 1884, the establishment of salary schedules in public school systems, and set forth the four following principles:[1]

1. The best talent and largest experience will be found in our primary grades of school.
2. Our best primary teachers and our best high school teachers will receive equal salaries, and these the maximum.
3. A sliding scale of salaries will be adopted, based upon qualifications and experience, ranging from a minimum for beginners to the maximum for the well-establisht and successful instructor.
4. These salaries will never be subject to a decrease during the term of office of any incumbent.

A few of the larger cities in the United States have had establisht salary schedules since before the time of the Civil War, but these are few in number, and the schedules were more nearly lists of the salaries which had been paid, rather than schedules of proposed salaries to be paid.

In the N. E. A. Report of Salaries of Public School Teachers, the schedules of 547 cities are reported for 1905. The minimal salaries, the increases, the maximal salaries and the actual average salaries are recorded. A further study of salary schedules was made in 1913[2] by the National Education Association. In 1914 the United States Bureau of Education published as Bulletin 16, "The Tangible Rewards of Teaching," in which all the data, available at that time, on the question of teachers' salaries was presented. These two reports give the salary schedules of many of the typical cities of the country, and indicate a decided increase not only in the number of cities having schedules but also in the adequacy of the schedules themselves. In 1918 Commissioner Claxton of the United States Bureau of Education collected data on the salary schedules in 108 cities. In the present study 237 cities of the 365 replying answered the question "Do you have an establisht salary schedule" in the affirmative.[3] Since this is a representative sampling of the cities thruout the country, it indicates

[1] Address and Proceedings of N. E. A., 1884, page 49.
[2] N. E. A. Report on Teachers' Salaries, Part III.
[3] See Table XXVII.

the extremely rapid recent growth of the salary schedule principle in the United States. Its development has been so rapid that in a great many cases it has been the result of temporary expediency, rather than of a conscious desire to further the progress of education. In a great many instances where salary schedules have been advocated or secured thru the efforts of teachers' organizations, they have been primarily for the purpose of establishing higher salaries and securing them more uniformly thruout the teaching group, and also to guard against favoritism or "local pull" in the granting of higher salaries. In many cases, where the salary schedules have been advocated and adopted by school boards, it has been for the purpose of establishing minimal and maximal salaries at the lowest figures possible, and for the purpose of safe-guarding themselves against having to pay more than these figures to any individual teachers. This at the same time safeguarded them from any accusations of favoritism. The large number of superintendents and school officials who report that their salary schedules are "no longer adequate" or "are being revised" or admit their insufficiency by the granting of special bonuses, would indicate that the above described conditions are true. Such returns, as those obtained from the State Superintendents, reported in Chapter III, would indicate the strong tendency to adjust teachers' salaries to the cost of living, and in addition, make them commensurate with the kind of work done. In order that this may be done, certain principles governing the making of salary schedules must be evolved, and quite generally accepted. As a means of throwing some light upon this problem, some of the more recent advances in other countries will be given.

The important part which the French schools have played in the development of national morale is now well recognized. During the early part of the war, the efficiency of the schools was seriously threatened by the heavy enlistment of the teachers in the armies of defense. In addition to government regulations relative to keeping schools in session, salary schedules were provided which materially increast the financial reward. A national attempt was made to keep the schools at as high degree of efficiency as they had been at the outbreak of the war.

During the early part of the war England met its educational emergency, evidenst in one way among others by an extreme shortage of competent teachers, by the granting of bonuses, which in no cases exceeded 10 per cent, whereas living expenses had increast several times that. This plan not proving adequate, further provisions were taken in the form of restrictions against increast rents. As this proved no more effective than the bonus, and was in reality but a small

bonus in another form, a departmental committee was appointed to inquire into the principles which should determine the construction of scales of salaries for teachers in the elementary schools. This committee advocated the establishment of a minimal salary of $500 for men, and $450 for women. Several schedules were proposed which went from these minimal to maximal salaries of $1,050 to $1,500, by varying increments over varying periods of time at varying rates.

The British colony of Cape of Good Hope has accomplisht much more along the line of adequate salary schedules than has England. In its Educational Ordinance of September, 1917, all teachers are divided into three classes (A, B, C), according to the amount of education and the certificate held. Salary schedules vary for these classes of teachers. They are made low for Class C, the lowest class, in order to put a premium upon more training and the securing of better certificates. Provision is also made for leaves of absence for advanst study, and for additions to salaries where any teacher holds a higher certificate than the nature of the work calls for. Other elements of flexibility and rewards are offered to the ambitious teacher, in the form of pensions, expenses home for vacations, if the railroad fare exceeds $10,[1] etc.

The salaries for principal teachers in schools with more than 150 pupils vary according to the size of the schools from $2,000 to $3,500 for men and $1,300 to $2,050 for women in high schools; from $1,600 to $2,500 for men and $1,150 to $1,600 for women in intermediate schools; and from $1,325 to $2,250 for men and $900 to $1,550 for women in primary schools. The regular teachers vary according to their classification as follows:

Men Teachers

Grade A.—Standards C, D, E: $1,100 rising by three annual increments of $100 and twelve of $62.50 to $2,150.

Grade B.—Standards A, B. VI and VII: $800 rising by three annual increments of $100 and twelve of $42.50 to $1,610.

Grade C.—All lower classes including fifth: $600 rising by three annual increments of $75 and twelve of $42.50 to $1,335.

Women Teachers

Grade A.—Standards C, D, E.: $800 rising by three annual increments of $50 and twelve of $31.25 to $1,325.

Grade B.—Standards A, B, VI and VII: $600 rising by three annual increments of $50 and twelve of $25 to $1,050.

Grade C.—All lower classes including fifth: $500 rising by three annual increments of $50 and twelve of $25 to $950.

[1] Salaries are all stated in terms of dollars instead of pounds in order that they may be more easily compared.

The standard which has been set by the Colony of the Cape of Good Hope is particularly noteworthy when it is realized that these salaries are better in proportion to the cost of living in that Colony than the same figures would indicate in this country. An estimate of this may be had by knowing that "board and room" for a teacher in the various government boarding schools of the Colony is estimated at about $200 per year.

In Canada teachers' salaries is a subject of much discussion at the present time. From a study made by George J. Trueman of Stanstead,[1] Quebec, we learn that for the year 1915–16 the average salary of 631 Catholic women teachers was $198 per year; the average salary for 1564 Protestant women teachers was $563; the average salary of 400 Catholic men teachers was $793 and of 136 Protestant men teachers, $1,477. In the Province of Quebec from the same study, we find that the average monthly salary for 12 months for 1915–16 was as follows:

Rural elementary teachers	$24.27
Elementary schools in towns	34.73
Rural model schools	40.70
Rural academies—grades 8 to 11	61.03
Suburban academies—grades 1 to 7	47.22

In some of the western provinces the shortage of teachers has become so acute that they are advertising in eastern Canadian papers for teachers, with a provincial government guarantee of $840 as a minimal salary in rural schools. This is tending to elevate the standard thruout the whole dominion, and will, undoubtedly, result not only in the better payment of teachers, but also in the securing of more adequate preparation.

In the United States, in addition to the change mentioned above regarding the making of salary schedules more numerous in the cities of all sizes thruout the country, there has been a rapidly developing tendency to adjust the salary schedules to various divisions of school work. This has resulted in the formation of many very elaborate and cumbersome salary schedules. Certain communities have, however, reacted against this tendency and have gone to the other extreme of establishing minimal and maximal salaries for elementary, intermediate and high school teachers, with practically no differentiation of salary within these groups for any other item than length of teaching experience. In order to illustrate the salary schedule situation as it is at the present time, several actual schedules will be printed as they were forwarded to the National Education Association during the early part of 1919. These schedules are not submitted as models, either of

[1] Trueman, Geo. J., "School Funds—Province of Quebec." Teachers College Contributions to Education No. 196.

what schedules should or should not be. They were selected from the schedules sent in from cities within each size group. They are not in all cases even typical of the salary schedules within the cities of that size, but they are all worthy of study for one or more of the principles of schedule making which they illustrate. The standards set in some of these schedules, particularly those of Newark, Highland Park and Cleveland Heights promise well for the solution of the salary problem, since they show what was actually being done at the close of the year 1918–19. No elaborate criticism of any of these schedules will be attempted, since the standards and the rules set forth are determined by local conditions. When all teachers and school patrons are intelligently interested in the permanence and efficiency of the educational system, it will be much easier to establish salary schedules which more closely approximate ideal conditions. It is one purpose of this study to so present the problem of teachers' salaries and the arrangement of salary schedules that this necessary interest may be at least started, and lead to many further investigations. When enough of these result in reliable data, it will be possible to take steps toward the standardization of salary schedules and the conditions under which teachers work, which are not thought possible at the present time.

SALARY SCHEDULES

SCOTIA, NEW YORK

General Regulations

Increases in salary shall be made September 1 of each year, on a basis of merit to be determined by Committee on Teachers and Instruction.

Principals and Special Teachers

The Principals, Librarian, teachers of Music, Drawing, Household and Manual Arts, Physical Education, or any other so-called "special subjects" are not on a regular schedule, but shall receive such compensation as the Board of Education, after considering the recommendations of the Committee on Teachers and Instruction, shall determine.

Regular Teachers

1. Regular teachers shall receive such compensation for their initial year as their training, length and quality of experience, and the nature of their duties shall warrant.

2. An annual increase from $0. to $100 shall be granted to each regular teacher in the system, who is not a teacher of so-called "special subjects." There shall be an additional increase of $40 upon the completion, with credit, of two full courses, previously approved by the Supervising Principal, in a summer school. There shall also be a further increase of $40 for a second summer's course upon the same conditions.

Increases will be granted in accordance with above, until final maximums have been reacht as follows:

High School	$1,300
Junior High	1,200
Elementary School	1,100
Principals—High School	1,500
Principals—Elementary School	1,300

Adopted February 14, 1919.

SCHEDULE OF SALARIES FOR MILLVALE, PA., PUBLIC SCHOOLS

Adopted by Board of Directors June 1, 1918.

Grades One and Seven

Without experience	$65 per month
One year's experience	70 per month
Two years' experience	75 per month
Three years' experience	80 per month

Grades Two, Three, Four, and Kindergarten

Without experience	$55 per month
One year's experience	60 per month
Two years' experience	65 per month
Three years' experience	70 per month

Grades Five and Six

Without experience	$60 per month
One year's experience	65 per month
Two years' experience	70 per month
Three years' experience	75 per month

Grade Eight

Without experience	$70 per month
One year's experience	75 per month
Two years' experience	80 per month
Three years' experience	85 per month

Note.—When salaries have been once fixt at the opening of a school term, they will remain constant thruout that term. If a teacher should be transferred to a new grade during the school term, she will receive the salary of the grade to which she has been transferred, according to experience.

OKLAHOMA CITY SALARY SCHEDULES 1919-1920

Years of Service	(1)	(2)	(3)	(4)	(5)	
Grades and Kindergarten	$80	$90	$100	$110	$115 120	Non-normal grad. Normal graduate
Asst. Kindergarten	70	80	90			
Domestic Science	90	95	100	110	115	
Manual Training	100	110	115	120	125	
Supervisors	1400	1500	1600	1700	1800	
H. S. Dept. Heads	1400	1500	1600	1700	1800	
H. S. Asst. Academics	1200	1300	1400	1500	1600	

Prin. & Asst. Principal of High School, fixt by Board.

Substitutes (Grades) - $4.50 per day
Substitutes (H. S.) 5.00 per day

PRINCIPAL'S SALARIES

Years of Service	(1)	(2)	(3)	(4)
Number of Teachers, including Principal.				
1 to 6 fixt by Board				
7 to 10	$1300	$1350	$1400	$1500
11 to 13	1400	1500	1600	1700
14 to 16	1500	1600	1700	1800
17 to 24	1700	1800	1900	2000

SALARY SCHEDULE FOR THE ELEMENTARY TEACHERS OF LACONIA, N. H.

Effective January 1st, 1918.

First year	$500	minimum
Second year	550	"
Third year	600	"
Fourth year	650	"
Fifth year	700	maximum

A principal of a building of three or more rooms wil. receive $25 per year in addition to her regular salary. An additional $25 will be given to a teacher after three years' experience for taking a summer school course approved by the superintendent of schools.

CLEVELAND HEIGHTS SCHEDULE

OLD AND NEW SALARY SCHEDULE

Year	Old Class "A"	New Class "A" High School	New Class "A" Elementary	Old Class "B"	New Class "B"	Old Class "C"	New Class "C"
1	$700	$1000	$1000	$600	$750	$500	$600
2	775	1100	1100	675	825	550	675
3	850	1200	1200	725	900	600	725
4	950	1300	1300	800	975	650	800
5	1000	1400	1400	850	1050	700	850
6	1100	1500	1500	925	1100	750	925
7	1200	1600	1600	1000	1175	800	1000
8	1300	1700	1700	1075	1250	850	1075
9	1400	1800	1800	1150	1300	900	1150
10	1500	1900		1200	1375	950	1200
11	1600	2000		1250	1450	1000	1250
12	1700	2100		1300	1500	1100	1300
13	1800	2200		1400	1600	1200	1400
14	2000	2300					

Heads Depts.
2400
2500
2600
2700
2800
2900
3000

Class "A"—Teachers having diplomas from college, or college and normal school.
Class "B"—Teachers having diplomas from normal school.
Class "C"—Teachers having diplomas from *neither* college nor normal school.
Note:—The system is not taking any more teacher of the "C" group.

SALARY SCHEDULE FOR HIGHLAND PARK SCHOOLS

Highland Park, Michigan. **In effect 1917-18.**

Year	1	2	3	4	5	6	7	8	9	
1. High School Principal	$2400	$2640	$2880	$3120	$3360	$3600*	$3840	$4000		1.
2. Principal, 26 rooms or more	2040	2220	2400	2580	2760	2940	3120*	3300	3500	2.
3. Principal, 15-25 rooms	1860	2040	2220	2400	2580	2760	2940*	3120	3300	
4. Principal, 9-14 rooms	1500	1680	1860	2040	2220	2400	2580*	2760	2940	
5. Principal, 8 rooms	1080	1200	1320	1440	1560	1680*	1800			
6. High School Head	1500	1680	1860	2040	2220	2400	2580*	2760	2940	4.
7. High School Teacher	1200	1320	1440	1560	1680	1800*				6.
8. Grade Teacher	1080	1200	1320*	1440	1560					3.
9. Kindergarten Teacher	Same as No. 8. If teaching only one session 25% less.									
10. Study Room Teacher	200 pupils, if qualifications are same, same as No. 6; less than 200, same as No. 7									
11. Nurses	960	1080	1200	1320	1440	1560*				5.
12. Stenographers, Clerks, Bookkeepers	720	840	960							
13. Phone Operator	600	720	840							
14. Business Officer	Same as No. 4.									
15. Supervisor of Buildings	Same as No. 4.									
16. Attendance Officer	1080	1260	1440	1620	1800	1980	2160			
17. Summer School Teachers, etc.	Salary $720-$840=$3.50 per day. $1200-$1400=$4.50 per day. $960-$1080=$4.00 per day. $1560=$5.00 per day. (Based on salary already received)									

Janitors and Engineers	First 3 mo.	Next 6 mo.	Next 6 mo.	Next 9 mo.	Next Year	
18. Assistants—Men, ab't 55 hrs.	$75	$80	$85	$90 *		5.
19. Women, about 45 hrs. per wk.	50	55	60*			
20. Stevens	75	80	85	90*		
21. Angell and Thomson	85	90	95	100	105*	
22. Ferris, Ford and Willard	95	100	105	110	115	
23. High	120	125	130	135	140	
24. Engineers	Same as janitor for same building.					
25. Firemen, about 56 hrs. per wk.	75	80	85	90*		

*One must be of exceptional value to be advanst beyond this point.

A. Teachers considered satisfactory are to be advanst each year. Those not successful will not be re-elected In a few cases, in which the degree of success cannot be determined, teachers may be re-elected without increase.
B. Absence—When a teacher is absent, all or part of the salary of said teacher for the time absent may be deducted, at the discretion of the Superintendent, with the approval of the Board of Education.
C. Substitute Teachers—Substitute teachers shall be appointed by the Superintendent and reported to the Board of Education for approval. The pay of each substitute shall be fixt by the Superintendent and reported to the Board of Education for approval.
Requirements—All teachers must have a State Life Certificate and be citizens of the United States. Special requirements below.

1. College or university degree, ten years' experience as a teacher, five of which shall be as a high school principal
2. Two years' normal course and college or university degree. Ten years' experience as a teacher, five of which shall be as a principal of a graded school.
3. Two years' normal course. Experience elsewhere to be credited about one-half.
4. College or university degree. Four years' experience as a high school teacher.
5. Twelve months' service with two weeks' vacation.
6. College degree and experience.

SCHEDULE OF TEACHERS' SALARIES—NEWARK, N. J.

Effective September 1, 1917

HIGH SCHOOLS

Grade	Temporary			Permanent							
	1st Yr.	2nd Yr.	3rd Yr.	1st Yr.	2nd Yr.	3rd Yr.	4th Yr.	5th Yr.	6th Yr.	7th Yr.	Max.
Principals	$3600	$3700	$3800	$4000	$4200	$4400					$4600
Head Assts. & Heads of Depts											
Men	2100	2200	2300	2500	2700	2900	3100				3300
Women	1600	1700	1800	2000	2200	2400					2600
Assistants:											
Men	1500	1600	1700	1800	1900	2000	2100	2300	2500		2700
Women	1000	1100	1200	1300	1400	1500	1600	1800	2000		2200
Study Hall Teachers	800	900	1000	1100							1200
Librarians	1000	1100	1200								1300
Laboratory Assistants	500	550	600	650							700
Principals' Assistants	1400	1500	1600	1700	1800	2000	2200	2400			2600
Teacher Clerks	800	900	1000	1100	1200						1300
Assistant Teacher Clerks	600	650	700	750	800						850
Physical Training—Head Teachers:											
Men	1600	1700	1800	1900	2100	2300	2500				2700
Women	1200	1300	1400	1500	1600	1700	1800	2000			2200
Assistants:											
Men	1300	1400	1500	1600	1700	1800	2000				2200
Women	1000	1100	1200	1300	1400	1500	1600				1800
Pianist	400	450	500	550							600

PRIMARY AND GRAMMAR SCHOOLS

Principals:											
Men—More than 14 classes	$2100	$2200	$2300	$2500	$2700	$2900	$3100				$3300
Less than 15 classes	1800	1900	2000	2100	2300	2500					2700
Women—More than 14 classes	1800	1900	2000	2200	2400	2600					2800
Less than 15 classes	1500	1600	1700	1800	1900	2100					2300
Vice Principals:											
Grammar	1400	1500	1600	1700							1800
Primary	1100	1200	1300	1400	1500						1600
Supervising	1100	1200	1300	1400	1500	1600					1700
Head Assts. & First Assts	900	1000	1100	1200	1300	1400					1500
Assts. & Kindergarten Directresses	700	750	800	850	900	950	1000	1050	1100		1200
Kindergarten Assistants	700	750	800	850	900	950	1000	1050			1300 1400 1100 1200 1300
Physical Training:											
Men	1100	1200	1300	1400	1500	1600	1700				1800
Women	800	900	1000	1100	1200	1300					1400

SCHEDULE OF TEACHERS' SALARIES—NEWARK, N. J (Continued)

PRIMARY AND GRAMMAR SCHOOLS

Grade	Temporary			Permanent							
	1st Yr.	2nd Yr.	3rd Yr.	1st Yr.	2nd Yr.	3rd Yr.	4th Yr.	5th Yr.	6th Yr.	7th Yr.	Max.
Teacher Clerks:											
Less than 30 classes	$ 650	$ 700	$ 750	$ 80[illegible]	$ 850	$ 900	$ 950	$1000	$1050		$1100
30 classes and over	650	700	750	800	850	900	950	1000	1050	1100	1200
Assistant Teacher Clerks	600	650	700	750	800	850	900				950
Manual Training, Printing:											
Men	1100	1200	1300	1400	1500	1600	1700				1800
Women	800	900	1000	1100	1200	1300	1400				1500
Art, Music, Sewing, Cooking, Science	800	900	1000	1100	1200	1300	1400				1500

SPECIALS
UNGRADED SCHOOLS

Head Teachers:											
Less than 2 classes	$1300	$1400	$1500	$1600	$1700						$1800
2 or more classes	1300	1400	1500	1600	1700	1800					1900
Assistants	800	850	900	950	1000	1050	1100	1150	1200		1300 1400 1500

BOYS' VOCATIONAL SCHOOL

Principals	$2100	$2200	$2300	$2500	$2700	$2900	$3100				$3300
Assistants:											
Men	1100	1200	1300	1400	1500	1600	1700	1800			2000
Women	1000	1100	1200	1300	1400						1500
Teacher Clerks	650	700	750	800	850	900	950				1000

GIRLS' VOCATIONAL SCHOOL

Principals	$1800	$1900	$2000	$2200	$2400	$2600					$2800
First Assistants	1000	1100	1200	1300	1400						1500
Assistants	800	900	1000	1100							1200
Teacher Clerks	650	700	750	800	900	950					1000

DEFECTIVES

Head Teachers	$1100	$1200	$1300	$1400	$1500	$1600					$1700
Assistants	800	850	900	950	1000	1050	1100	1150	1200		1300 1400 1500

CLASSES FOR THE BLIND

Head Teachers	$1200	$1300	$1400	$1500	$1600	$1700					$1800
Assistants	900	1000	1100	1200	1300	1400	1500				1600

SCHOOL FOR THE DEAF

Principals	$1700	$1800	$1900	$2100	$2300						$2500
Assistants	900	1000	1100	1200	1300	1400	1500				1600

TUBERCULAR

Assistants	$800	$850	$900	$950	$1000	$1050	$1100	$1150	$1200		$1300 1400 1500

SPEECH CORRECTION

Assistants	$1200	$1300	$1400	$1500							$1600

CO-OPERATIVE

Assistants	$1200	$1300	$1400	$1500							$1600

SUPERVISORS

Director of Physical Training	$2100	$2200	$2300	$2500	$2700	$2900	$3100				$3300
General Supervisor	2000	2100	2200	2300							2400
Director of Manual Arts	2100	2200	2300	2500	2700	2900	3100				3300
Director of Music	1700	1800	1900	2100	2300						2500
Supervisor of Drawing	1500	1600	1700	1900	2100						2300
Supervisor of Domestic Art	1500	1600	1700	1900	2100						2300
Supervisor of Domestic Science	1500	1600	1700	1900	2100						2300
Supervisor of Defectives	1400	1500	1600	1700	1900						2100
Supervisor of Manual Training:											
Grammar	1400	1500	1600	1700	1900						2100
Primary	1200	1300	1400	1500	1600	1800					2000

ASSISTANT SUPERVISORS

Physical Training	$1200	$1300	$1400	$1500	$1600	$1800	$2000				$2200
Music	1100	1200	1300	1400	1500	1600	1800				2000
Drawing	1100	1200	1300	1400	1500	1600	1800				2000
Domestic Art	1100	1200	1300	1400	1500	1600	1800				2000

SUBSTITUTES

High School—Men	$5.00 per day; Women $4.00 per day.
Elementary—Men and Women	$3.00 and $4.00 per day.

NEWARK SALARY SCHEDULE (Continued)

NOTES

1. Head assistants and first assistants, teaching classes of the eighth grade, shall receive $100 additional while teaching such grade.

2. First assistants and head assistants teaching the eighth grade, promoted to a grammar vice principalship, shall be paid $100 in addition to the amount of salary they received at the time of their transfer, including the amount paid for teaching the eighth grade.

3. Kindergarten directresses in charge of kindergartens having more than four kindergarten assistants shall receive $100 additional to the salary schedule for directresses.

4. Assistants in charge of classes for crippled children and of open air classes for anaemic children shall be paid in accordance with the schedule for assistants in elementary schools.

5. In all cases of promotion of teachers to higher positions, they shall be advanst to the next higher salary grade, provided, such increase shall not change the date of the annual increase fixt prior to such promotion.

6. All teachers must serve three years as temporary teachers, upon the completion of which, if satisfactory, they shall enter upon the first year of the permanent grade.

7. All increases of salary under this schedule shall be based upon merit and efficiency to be ascertained as far as practicable from the official record of the Board of Education. Such increases shall be recommended by the Superintendent and approved by the appropriate committee.

8. Teachers absent from duty on account of furlough or other excused absence for a period in the aggregate not longer than two months in any one year shall not suffer thereby any loss of time in reaching the next higher salary grade.

9. Principals and teachers of alternating schools which have been in operation for at least one year shall receive an additional increase of 5 per cent of their salaries for such services. This does not include kindergarten directresses and assistants and teachers not having alternating classes and teachers on special schedule.

10. No salary now paid shall be reduced by reason of this schedule.

ELEMENTS TO BE CONSIDERED IN MAKING SALARY SCHEDULES

For convenience in discussing these elements they have been groupt under the two inclusive headings Economic Elements and Educational Elements. Many of these elements will involve principles which are rather definitely settled, others will have the prestige of common practice, while others have been applied successfully, but not as yet to teachers.

A. ECONOMIC ELEMENTS

1. Relation of Salary Schedule to Wealth of Community

As long as the question of the payment of teachers remains one for local settlement it might seem that it would be somewhat influenst by the per capita wealth of the community. A casual examination of the schedules obtained from cities over the entire country might give weight to the general statement that the more wealthy and more rapidly growing communities pay larger initial salaries, and extend them to higher maximal salaries. In order to determine the degree to which the above generalization is true, the following study was made:

One hundred cities were selected from the "Financial Statistics of Cities for 1916" (Table XXXII) by taking each alternate city. Since the cities are arranged alphabetically according to size, this gave a random sampling of the cities in the country with a population in excess of 30,000. The per capita wealth was secured on the basis of estimated true valuation over a period of years extending from 1910 to 1916. The average amount of salary per elementary teacher was also computed for the same period. The cities were then rankt according to the percentage of increase or decrease in per capita for 1916 over 1910, and also rankt according to percentage of increase or decrease in average salary of elementary teachers during the same period. The coefficient of correlation was then establisht for the 73 cities of the 100 which had complete data for both items. Spearman's formula was used in obtaining this coefficient, and the result $r = .038$, was obtained. This coefficient indicates that for these 73 typical cities in the United States, there was during this interval of 6 years no association between the per cent of increase in per capita wealth and the per cent of increase in average salary paid to elementary teachers. In other words, it was purely a matter of chance whether the city

which increast most in per capita wealth paid its elementary teachers an increast salary. In fact, the actual figures show that the city which decreast most in per capita wealth and therefore, rankt first or lowest in increase in per capita wealth rankt 58th in the percentage of increase in salaries to elementary teachers, while the city which rankt 46th in the increase in per capita wealth, rankt first or lowest in the amount of increase given to elementary teachers. The above study would conclusively indicate that this question of increases to teachers' salaries is largely a matter of local progress, and depends more upon the development of a favorable community attitude or upon the aggressive work of a superintendent or teachers' organization, than upon any economic development of the community. Such a study is evidence of the oft-quoted statement that a community will find the means of supporting schools when convinst that it is a desirable thing to do.

The second consideration under the relation of community wealth to teachers' salaries is the question of relative financial burden carried. This is more prominent in some sections of the country, particularly in the southern section, where many districts have a very low per capita wealth. In these districts the tax burden of supporting schools upon the same level as the more favored communities becomes so high as to be prohibitive. At least two determining conditions enter this situation. First, the lack of natural resources for certain sections of the States, and second the principle of placing such a low valuation upon the property that the tax rate seems entirely out of proportion to the property value. Readjustment of salary schedule within these communities will necessitate a change in the tax system and assistance from a larger taxation unit. In some instances, aid can be obtained from the State as a unit of taxation, but there would remain whole States where the burdens would be entirely out of proportion to those born in other sections of the country. The only permanent solution of the economic side of the salary problem for these sections is in some form of federal subsidy.

2. Relation of Salary Schedules to Expenditures for Other Purposes

The question of determining schedules for teachers' salaries is one of the important financial problems of any city. In Table LXIII, the percentage of the total operating expenses expended for teachers' salaries in all of the cities of the United States, having a population of 25,000 or over, is given for the years 1909-10, 1910-11, 1911-12, 1912-13, 1913-14 and 1914-15. One thing that is obvious from a glance at the table, is the very great range in per cent of total expenses

TABLE LXIII

PERCENTAGE OF TOTAL OPERATING EXPENSES EXPENDED FOR TEACHERS' SALARIES

(Number of cities devoting each percent indicated.)

%	1910-11			1911-12			1912-13			1913-14			1914-15			1915-16		
	A	B	T	A	B	T	A	B	T	A	B	T	A	B	T	A	B	T
27		1	1															
31											1	1						
32														1	1			
40								1	1									
41																		
42					2	2								1	1			
43					1	1												
45					1	1												
46											1	1		3	3		1	1
47					1	1												
48		2	2		1	1		1	1								1	1
49		2	2		3	3								1	1		1	1
50		3	3		4	4		2	2		2	2		1	1			
51	1	6	7		5	5		2	2		2	2		1	1		3	3
52		3	3		2	2		4	4		1	1		4	4		2	2
53		2	2		5	5		7	7					5	5		2	2
54	1	6	7		7	7	2	5	7	1	3	4		4	4		1	1
55		1	1		7	7		8	8		3	3	1	3	4		10	10
56		9	9		5	5		4	4	1	4	5	1	8	9		8	8
57		5	5		6	6	1	4	5	3	8	11		7	7	2	3	11
58	1	9	10	2	11	13	1	8	9		7	7	1	14	15		11	11
59		8	8	1	15	16	1	11	12	2	9	11	3	6	9	1	10	11
60	1	10	11	2	10	12	2	7	9	1	4	5	5	9	14		10	10
61	1	5	6	1	6	7	1	13	14	3	11	14	1	7	8		3	3
62	1	6	7	1	8	15	1	7	8	2	15	17	2	11	13	4	13	17
63	4	8	12	4	5	9	4	14	18	1	8	9	2	7	9	5	9	14
64	3	6	9	3	7	10	4	15	19	2	11	13	1	15	16	4	11	15
65	3	2	5	2	8	10	5	8	13	5	9	14	8	10	18	4	12	16
66	3	6	9	3	5	8	3	7	10	4	11	15	4	10	14	2	8	10
67	1	4	5	6	5	11	8	4	12	5	8	13	4	6	10	4	5	9
68	2	5	7	1	9	10		4	4	5	5	10	3	5	8	2	4	6
69	4	3	7	3	2	5	1	3	4	3	3	6	4	3	7	3	8	11
70	1	2	3	6	2	8	2	5	7	2	4	6	6	1	7	8	2	10
71	1	3	4	2	3	5	3	1	4	2	5	7					2	3	5
72		1	1		2	2	3	2	5	1	3	4		1	1	3	1	4
73	1	2	3	1		1		2	2	2	3	5	1		1	1	2	3
74		1	1	1		1		3	3					3	3			
75								1	1	2	1	3		1	1			
76		1	1				1	2	3	1	1	2						
77	1		1		1	1		1	1							1	1	2
78		1	1														1	1
79		1	1		1	1					2	2						
80											1	1						
82																		
83				1		1	1		1				1		1	1		1
84																	1	1
85																		
86	1		1															
87					1	1												
88																		
Medians	65	60	62	66	60	62	66	62	63	67	63	64	65	61	62	67	62	63

A—Cities over 100,000. B—Cities 25,000-100,000. T—Both together.

expended for teachers' salaries. During 1910 this ranged from one city which spent only 27 per cent on teachers' salaries to another which spent 86 per cent. The medians for the two groups of cities into which the table is divided, show a surprising consistency thruout the period of 6 years. In Table LXIV which gives the changes in per cent of total operating expenses devoted to teachers' salaries in these cities, we find a correspondingly large range with the heaviest part of the distributions centering around the "0" change. The medians in all cases, except where the change was computed between 1910-11 and 1915-16, is either "0" or +1% or —1%. Even in the last column, where the

TABLE LXIV

CHANGES IN PER CENT OF TOTAL OPERATING EXPENSES DEVOTED TO TEACHERS' SALARIES.*

All cities over 25,000—1910-11 to 1915-16.

	1910-11 to 1911-12	1911-12 to 1912-13	1912-13 to 1913-14	1913-14 to 1914-15	1914-15 to 1915-16	1910-11 to 1915-16
+31	1					
+25		1				
+20		1				
+19					1	1
+18			1			1
+17		3				
+16			1			1[1]
+15		1				2
+14			2			2[2]
+13	1	1	1		1	1
+12			3			2[2]
+11	1	2	1	1	1	4[3]
+10	2	2	2	1	2	2
+ 9	5	1	1		1	3
+ 8		3	3		2	5[3]
+ 7	1	1	5		1	3
+ 6	3	7	7	3	8	15[3]
+ 5	9	6	9		10	9[4]
+ 4	9	11	7	8	6	14[4]
+ 3	8	8	12	6	10	14[3]
+ 2	9	20	19	13	26	14[3]
+ 1	10	22	24	21	18	10[5]
0	15	19	20	29	23	15[6]
— 1	9	16	16	16	26	12[3]
— 2	14	14	14	18	15	8[6]
— 3	15	10	5	10	14	6[3]
— 4	8	1	7	9	4	4[3]
— 5	5	6	3	5	3	7[3]
— 6	3	2	8	5	3	6
— 7	4	1		8	1	5
— 8	5	1	3	7	3	4
— 9	1	1		4	1	4
—10	2	1	1	4		3[3]
—11	2			2	1	2
—12	2	1	1	3		
—13	1	3				1
—14	1			1		
—15				1		
—16			1	1		1
—17						
—18			1			
—19					1	
—20				1		
Medians	0	Plus 1	Plus 1	Minus 1	0	Plus 2

[1]From 1911-12 to 1915-16. 1910-11 figures not available.
[2]One of the cases as above.
[3]Six cases as above.
[4]Four cases as above.
[5]Two cases as above.
[6]Three cases as above.

change in per cent is figured over a period of 5 years, the median change was located at +2%. These tables show the very great variation in the percentage of total operating expenses spent for teachers' salaries, and also in the change of that per cent which would further substantiate the statement that salary adjustments are, at the present time, matters of local initiative. Further evidence to prove the above point is given by Tables LXV, which gives the distribution of the annual amount spent for elementary teachers' salaries for each

* Compiled by L. M. Wilson.

TABLE LXV

DISTRIBUTION OF ANNUAL AMOUNT SPENT FOR ELEMENTARY TEACHERS SALARIES FOR EACH PUPIL IN AVERAGE DAILY ATTENDANCE BY CITIES OF OVER 25,000 INHABITANTS FOR THE YEARS 1910-1916.

	1910-11	1911-12	1912-13	1913-14	1914-15	1915-16
$ 9.00- 9.99					1	
10.00-10.99						1
11.00-11.99		1	5	2	2	1
12.00-12.99	2	2	1	2		3
13.00-13.99	2	2	1	1	4	4
14.00-14.99	3	4	1	4	4	3
15.00-15.99	3	4	5	4	5	2
16.00-16.99	2	6	4	3	9	4
17.00-17.99	3	2	6	5	7	10
18.00-18.99	2	5	12	7	8	4
19.00-19.99	4	9	9	9	11	11
20.00-20.99	4	7	10	7	14	10
21.00-21.99	3	8	4	8	6	10
22.00-22.99	2	5	11	11	12	7
23.00-23.99	3	3	10	8	7	13
24.00-24.99	4	2	4	12	9	12
25.00-25.99	1	6	4	7	9	6
26.00-26.99	2	2	6	5	10	11
27.00-27.99	1	3	5	6	4	9
28.00-28.99	1	2	3	4	4	8
29.00-29.99		1	2	5	4	3
30.00-30.99		3	3	1	4	3
31.00-31.99			2	2	1	1
32.00-32.99	1		1	1	2	1
33.00-33.99						3
34.00-34.99			1	1	1	2
35.00-35.99				1		
36.00-36.99		1	3			3
37.00-37.99				1	2	1
38.00-38.99	1			2		
39.00-39.99					1	
40.00-40.99					1	
41.00-41.99						
42.00-42.99						
43.00-43.99					1	
44.00-44.99					1	1
45.00-45.99				1		
46.00-46.99						1
47.00-47.99						
48.00-48.99			1			
	44	78	114	120	144	148
Median	20.25	20.56	21.75	22.77	23.08	23.31
25%	16.50	17.06	18.46	19.22	18.50	19.40
75%	23.99	24.04	25.64	25.99	25.99	26.88

pupil in average daily attendance by cities of 25,000 inhabitants or over, for the years 1910-11 to 1915-16. The distributions show the same tendency to scatter over a wide range with a heavy grouping of the cases around a median of $20. The medians for the 6 years show a slight increase for each consecutive year, which indicates this same slight tendency to increase salaries of elementary teachers for consecutive years. Particular cases can be found among cities where the percentage spent for teachers' salaries is materially influenst by the presence or lack of other city projects. A new water supply or a city municipal building very frequently brings about a curtailment of the educational budget. There seems no reason why the amount spent for schools, a large per cent of which would go to teachers' salaries, should not be a fairly definite percentage of the total city

expenditures. The medians shown in Tables LXIII would indicate that current practice would put this percentage at about 65. Assuming that there has been certain financial exploitation of the teachers during the years for which these figures are computed, it would be safe to say that this percentage should be higher than 65 per cent.

3. Relation of Salary Schedules to the Cost of Living

As before stated, very few schedules, except as they have been revised within the last decade, have been made with any serious consideration of the cost of living for teachers. Where living conditions are at all unusual, either in regard to the price of standard commodities or in regard to exorbitant rents due to rapidly growing population, an adjustment should be made for that city in the teachers' salary schedule. One difficulty in such an adjustment is the principle which has become more or less commonly accepted—that a teachers' salary, when once raised, should not be decreast. This is not really a difficulty and should not be seriously considered, since it is very improbable that any such adjustment would relatively overpay the teachers. The same reluctance to having wages reduced exists in all other occupations as well.

4. Relation of Salary Schedules to Legislative Restrictions

In many cities and a number of states, cautious law makers have guarded against extravagance in the expenditure of funds by making laws of various descriptions limiting the amount to be spent for this or that purpose, or placing a limit upon the increase which can be spent for any item in one year over the preceeding year. While these laws seem financially safe when past, they inevitably impose a serious obstacle to progress when it becomes necessary to undertake some very needed improvements and undertake them at short notice. An instance of this was found in the situation at Louisville, Ky., when the city was confronted by a serious shortage of teachers, and the salary schedule was obviously too low. With a legal limit placed upon the amount of money which could be expended for school purposes, the board of education voted, as a means of increasing teachers' salaries and insuring enough teachers to open schools, to pay teachers their 10 months' salary on the basis of 8½ months, and trusted that a special election at the end of the fiscal year would provide the needed funds to continue payments at the increast rates. The schools are so close to the general public and the interests of the tax payers are so vitally concerned with the work of the schools, that it would seem safe to allow the schools to progress as rapidly as the communities are willing to appropriate funds for them, and not have them hampered by legislative restrictions.

B. EDUCATIONAL ELEMENTS

1. Salary Schedules as a Guarantee to a Career

One of the elements which has interfered with teaching as much as perhaps any other, has been the fact that teachers are so transient in their work. The average professional life of a teacher has been variously computed at from 5 years up. The findings of the present study would indicate that at least in the cities this figure is too low, and that the median amount of experience is between 7 and 10. At any rate, it is a well known fact that a great many people use teaching as a convenient stepping-stone to some other line of work which promises a more rapid and more permanent income. When salary schedules are so arranged that a teacher can begin with enough money to induce the better prepared and most ambitious men and women to choose teaching as a life work, and seriously prepare for it, there will be a possibility of making teaching a genuine profession, as well as a possibility for carrying on consecutive work thruout the different systems. Teaching suffers more than any other occupation from its inability to make capital from the experience of the workers in it, since so many of them leave the work at a time when experience is becoming richest. Salary schedules should, therefore, start at a high enough figure, and reach a high enough maximum to induce the type of men and women who should be teachers to seriously prepare for it, knowing that in the work of teaching itself, a career is offered.

2. Salary Schedules as an Incentive to Adequate Preparation

In connection with the above point, salary schedules must insure adequate preparation. It seems unwise to try to secure better preparation without giving a just compensation for that preparation when secured. Lack of such a policy prevents capable prospective teachers from going to the expense of thoro professional training when they know that after graduation from some teacher training institution, they cannot secure a minimal wage comparable with the other fields of work open to students with the same amount of preparation. An adequate minimal salary alone is not enough to secure this preparation. As advocated in the above point, increases given and the maximal salary attainable are also elements in determining the amount of preparation a prospective teacher is willing to invest in. If the promist rewards are so small that they represent no returns on the investment of time and money in securing preparation, only teachers with no business sense, or those inspired purely by a missionary desire to serve, would enter teaching. There has been within recent years a decided improvement in salary schedules in this respect. In the United

TABLE LXVI

MEDIANS FOR MINIMAL AND MAXIMAL SALARIES AS GIVEN IN THE SALARY SCHEDULES FOR CERTAIN CITIES LISTED IN U. S. BULLETIN No. 16—1914[1]

		I	II	III	IV	V	Total
	Elementary						
Minimum:	No. of cities	26	13	15	20	14	88
	Principals	1125	1013	863	813	810	913
	No. of cities	28	16	25	30	27	126
	Teachers	617	475	487	550	575	538
Maximum:	No. of cities	22	6	12	14	14	68
	Principals	2400	2350	1425	1567	925	1650
	No. of cities	26	15	23	30	27	121
	Teachers	1038	845	788	800	713	834
	High School						
Minimum:	No. of cities	19	8	8	13	12	60
	Principals	over 3000	2500	2350	1750	1325	2400
	No. of cities	26	16	22	23	24	111
	Teachers	977	950	833	875	750	846
Maximum:	No. of cities	25	16	20	22	28	105
	Teachers	1838	1550	1325	1275	942	1425

[1] "The Tangible Rewards of Teaching."

States Bureau of Education Bulletin, "The Tangible Rewards of Teaching," No. 16, 1914,[1] salary schedules for certain city school systems are given. The minimal salary, the amount of annual increase, the number of years for which increases are given and the maximal salary are recorded. A tabulation of these data, Table LXVI shows the following median results for the cities in the first five size groups. It will be obvious from these figures that in 1912-13, the year for which these data were collected, that the findings in Chapters I and II are substantially corroborated, since the minimal and maximal salaries vary directly as the size of the cities varies. In this connection, the median number of years of increase, both in the high school and in the elementary grades varies between 6 and 10, with a rather consistent median for the groups in the neighborhood of 8 yearly increases. A slight tendency is shown for the larger cities to grant a greater number of increases. The tabulation of the median increases for elementary teachers given in these different cities, varies from $35 to $60 as the cities increase from Size 5 to Size 1. The median increase runs from $55 to $85 for high school teachers as the size of the city increases. In connection with the value of salary schedules as a promise of a career and as an incentive to adequate preparation, the advance made within the last few years will be of interest. In the National Education Association study on "Teachers' Salaries and Cost of Living" for July, 1918, Appendix 7 gives the minimal and maximal teachers' salaries in 108 cities collected by the Commissioner of Education, May, 1918. As an indication of progress during the 5 years

[1] Size groups are similar to those defined on page 9.

between the collection of these data and those recorded in Table LVI the median maximal salaries for cities in Size Groups I, II and III are computed to be as follows:

Median Maximal Salaries for Elementary Teachers

Size Group I	$1,250
Size Group II	950
Size Group III	829

Median Maximal Salaries for High School Teachers

Size Group I	$2,240
Size Group II	1,988
Size Group III	1,540

A comparison of these with the median maximal salaries for 1912-13 given above, will show that within the 5 years a decided increase in maximal salary offered, occurred in all of these groups, which indicates a recognition on the part of school boards, especially in the larger cities of the necessity of a liberal maximal salary in order to secure the desired number of the right kind of teachers.

In order to show that the preparation of teachers can be controlled thru the salaries offered, 10 cities were selected from the cities included in the study in Chapter I which paid relatively low salaries, and the amount of preparation of the teachers was compared with the preparation of the teachers in 10 selected cities from the same list paying relatively high salaries.[1] The 10 cities paying relatively low salaries had median salaries for the 457 teachers who returned the questionnaire of $652, with a median amount of preparation above the 8th grade of 5.76 years. The 10 cities paying relatively high salaries had a median salary of $1,049 for the 548 teachers answering from those cities, with a median amount of preparation beyond the 8th grade of 6.44 years. This shows that even under present conditions the cities paying the better salaries are securing teachers with more adequate preparation. Table LVII and LVIII give these distributions, which by inspection reveal the situation.

In addition to the above mentioned necessity for having the minimum and maximum high enough to warrant preparation, another very important item is the amount of the annual increase and the number of years necessary to attain the maximum. A maximum of $1,800

[1] The 10 cities represented in the group paying the lower salaries are: Augusta, Ga., East St. Louis, Ill., Paducah, Ky., Millville, N. J., Indiana, Pa., Herrin, Ill., Carthage, Mo., Sandford, Fla., Horton, Kans.

The 10 cities represented in the group paying the higher salaries are: Columbus, Ohio, Des Moines, Iowa, Oakland, Calif., East Chicago, Ind., Pasadena, Calif., Cleveland Heights, Ohio, Great Falls, Nev., Prescott, Ariz., Lake Forest, Ill., Topanah, Nev.

TABLE LXVII

DISTRIBUTION[1] OF ELEMENTARY TEACHERS' SALARIES IN RELATION TO NUMBER OF YEARS' SCHOOLING ABOVE THE EIGHTH GRADE IN TEN CITIES[2] PAYING LOWER SALARIES.

Salary Groups	Number of years' schooling above eighth grade														Total
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	
$ 300- 349		1				1	3	1	1		1				8[3]
350- 399			1		3			1							5
400- 449					4	1	1								6
450- 499		1	1	1	14	17	12	3	1						50
500- 549		1	1	3	4	8	16	1	1	2					37
550- 599		1	3	5	8	15	19	2		1					54
600- 649		2	2	3	12	9	35	1	3						67
650- 699	1			1	7	10	15		1						35
700- 749			2	1	6	6	11	2	1						29
750- 799		1	1		7	3	7	3	1						23
800- 849				1	4	11	10	2	1	1					31[4]
850- 899			2		3	6	4	1	1						17
900- 949					3	7	4	2		2		1			19
950- 999				2	5	9	2	1	1	1					21
1000-1049		2	1	3	11	6	6	2	1						32
1050-1099			1	1	2	1	1	2	1			1			10
1100-1149					1		2	1		1					5
1150-1199								1							1
1200-1249						1									1
1250-1299						1									1
1300-1349				1			1								2
1350-1399															
1400-1449															
1450-1499															
1500-1599					1										1
1600-1699															
1700-1799					1										1
1800-1899															
1900-1999															
2000-2099															
2100-2199															
2200-2299															
2300-2399									1						1
2400-2499															
2500-2999															
3000-and over															
	1	9	15	22	96	112	149	26	15	8	1	2			457

[1]Data obtained from answers to the teachers' questionnaire shown on page 8
[2]List of cities included given on page 139
[3]Six of these teachers receive less than $300 per year.
[4]One teacher in this grade had 14 years' schooling above the eighth grade.

TABLE LXVIII

DISTRIBUTION[1] OF ELEMENTARY TEACHERS' SALARIES IN RELATION TO NUMBER OF YEARS' SCHOOLING ABOVE THE EIGHTH GRADE IN TEN CITIES[2] PAYING HIGHER SALARIES.

Salary Groups	Number of years' schooling above the eighth grade														Total
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	
$ 300- 349										1					1
350- 399															
400- 449															
450- 499							1								1
500- 549															
550- 599							1								1
600- 649															
650- 699						2	2	1							5
700- 749						4	24	1							29
750- 799			1	2		4	21	2	1						31
800- 849					3	6	13	4	6	1	1				34
850- 899					3	5	11	4	6	1					30
900- 949			1		1	5	20	8	1	4		1			41
950- 999			1		3	5	17	10	4	2					42
1000-1049			1	4	4	9	20	5	5	1	1				50
1050-1099				2	7	11	38	6	6		3				74
1100-1149				2	10	9	24	10	5	1	1	1			63
1150-1199				1	4	4	10	3							22
1200-1249						3	11	2	1						17
1250-1299					4	1	3	4	2	1					15
1300-1349				3	2	7	10	5	3	2					32
1350-1399		1	2	2	6	3	7	4	1	3	3				32
1400-1449			1		1		1		1						4
1450-1499					1										1
1500-1599				1		1	4	1		2					9
1600-1699				1	1		4	1		1		1			9
1700-1799				1			2		1						4
1800-1899															
1900-1999										1					1
2000-2099															
2100-2199															
2200-2299															
2300-2399															
2400-2499															
2500-2999															
3000-and over															
Total		1	7	19	50	79	244	71	43	21	9	3			548

[1]Data obtained from answers to the teachers' questionnaire shown on page 8
[2]List of cities included given on page 139

offers practically no incentive if it takes 16 years to reach it from the $1,000 minimum. Salary increases should be large enough to make an immediate appeal to ambition and thus promise a fairly adequate salary after 4 or 5 years. This is the period when the average individual desires to increase his responsibilities, purchase a permanent home, or make other investments of more than temporary nature. The gratification of these desires should be made possible. But a salary schedule should not carry teachers up to this point, and then not offer incentive enough to hold them. This is the objection to some of the salary schedules proposed by the English Committee[1] who recommend a granting of larger increases for a period, then of smaller increases and then, of larger increases again. Such plans as this have no justification, except that they save to the taxpayers the small difference in the increase during the years when the increase is reduced. It is just such evidence of pettiness in the financial control of the schools which disgust capable men and women to the point of leaving teaching. The most acceptable plan for granting increases seems to be to grant the same increase for each year of successful experience until the maximum is attained for that particular kind of work. It would seem that for an adequately prepared teacher, that is, one who has had six or more years preparation above the elementary school, no annual increase should be less than $100 or given for less than six or eight years.

3. Salary Schedules as Incentive to Progress While Teaching

The objection most frequently made to the introduction of salary schedules is that they so often and so quickly become automatic and taken for granted that they produce mental lethargy and destroy the incentive to self-improvement. Of course, this is not an objection to the schedules nor the principles involved, but rather a criticism of the way in which so many salary schedules have been administered. It is unfortunately true that many individuals, some of whom are teachers, will not do any more work than they think is absolutely necessary in order to secure their pay. For such, an automatic increase is not a reward of meritorious service nor a spur to make each year's work better than the preceding one. While it seems obvious that increases should not be received as a matter of course and regardless of the effort of the teachers, guarding against such a situation is one of the difficult elements in administering a salary schedule. In every other field of endeavor the reward is more nearly determined by the effort put forth. The principle reason why it is so difficult to apply

[1] Summary of the report by Dr. I. L. Kandel in Appendix XIII of "Teachers' Salaries and Cost of Living"—N. E. A., 1918.

this rule to teachers is the intangible nature of much of a teacher's work and the inability by present measures to determine the results obtained. In the face of these difficulties only a few cities have so far tried to put the granting of increases upon a basis of measurable or "rated" merit. In many cities where the superintendent reported that the granting of an increase depended upon successful work, it meant that the superintendent had to act as the judge of whether the work was successful or not, and this in most cases, meant that the increase was granted if the work was not of a nature to secure the dismissal of the teacher.

When better and more accurate supervisor's tests are developt so that is will be possible to rate a teacher justly into one of three or four classes, not alone in relation to other teachers, but more particularly in regard to her own previous work, the administration of increases to insure and reward progress will be relatively simple. A suggestive classification which is being used in several places is: Class I—Teachers whose work is entirely satisfactory, who have gained in ability to teach and in their mastery of the subject matter taught; Class II—Teachers whose work has been satisfactory but who have made no effort to improve during the year; Class III—Teachers whose work is not entirely satisfactory but have made a conscious effort to profit by experience and supervisory help, and who give promise of enough growth to warrant retention; Class IV—Teachers whose work and attitude have not been satisfactory enough to retain them in the system. With teachers classified into one or another of the above groups by a method which would be considered just by all concerned, it would be possible to say, for instance, that teachers in Class I shall receive the full regular increase, teachers in Class II half of the regular increase and teachers in Class III be retained without increase. As was stated above, the most urgent need, before the increases given under any schedule may produce the maximal incentive to progress, is the development of quantitative tests of teaching efficiency which can be fairly used by supervisory staffs, or by committees of teachers.

Two other elements should enter all salary schedules in order to make them serve as incentives to progress while teaching. These are (1) provision for summer study, and (2) provision for leaves of absence for study, research or educative travel. In providing for the first of these, many school systems follow the plan of making a flat allowance of $50 to the teacher who attends an acceptable summer school for the year when she attends. This is merely helping the teacher, to the extent of the amount given, to pay the extra expenses caused by attending the summer school, and makes no allowance for the fact

that the teacher is a stronger teacher. In many cities the number of such increases are limited to two. Better results would doubtless be obtained from the teachers and better returns on the investments for the district if this sum, for example $50, not only should be given for the year the teacher attends the summer school, but should be a permanent increase to the salary that she is otherwise entitled to. Furthermore, four such increases seem to be the minimum which should be fixt. Four is selected since the curricula of most schools are now arranged so that a year's work may be done in four summer sessions. This will enable teachers to advance their education by the unit of a year, and those holding an A. B. degree or its equivalent, to secure the master's degree in four summers.

Providing for the second of these additional elements, namely, periodic leaves of absence for study, research, travel, etc., is as good an investment for a city as it is for a college and it is a commonly accepted practice among the better colleges. Such a leave on at least half pay should be granted to teachers requesting it, not oftener than once in every seven years, providing the time is to be spent in a way that will result in professional growth.

4. The Element of Flexibility in Salary Schedules

In order more surely to escape the deadening effect of having salary increases, even adequate increases, become purely perfunctory and automatic, every salary schedule should have enough flexibility to adjust the wage to the needs in individual cases. Practically all the adjustments of this kind will be for teachers of special merit or ability who are worth more to the system than some others doing the same class of work, but who will be secured by other places at an advanst salary unless some local adjustment is made. This is not usually a problem unless the teacher is already receiving the maximal salary. Some salary schedules have attempted to meet this condition by providing so-called "super-maximal salaries" which may be secured by teachers who secure an advanst degree or some other prescribed qualification. This condition is not entirely satisfactory, since it can, in a way, be met by fulfilling requirements. Other cities have tried to solve the situation by establishing no maximal salaries and making each teacher an individual case as she progresses in tenure. This plan makes salary progress depend upon the vote of the school board and is subject to the objections which have given rise to salary schedules in order that this may be prevented. It would be almost impossible to administer the salary schedules, especially in larger ciites, without having maximal salaries fixt. No single device will produce the needed amount of flexibility. Different methods should be used

to meet situations as they arise. For example, where it is desirable to increase a teacher's salary over what the regular schedule calls for, she may: (1) be changed to another position with a higher schedule; (2) be made demonstration teacher for her subject or grade; (3) be placed in charge of a special experiment; (4) be made responsible for some assistant supervision with younger teachers; (5) be made assistant principal of the building in which she works; (6) be made responsible for a certain form of community service; or (7) be put in general charge of some extra school activity of the children. Many such adjustments may be made and in most cases, they will mean merely an addition to the teacher's "title," since if she is the kind of teacher who deserves the extra compensation, she will undoubtedly be doing several kinds of extra work for which she might be singled out and rewarded. The use, not to excess, of this principle of flexibility enables a salary schedule to remove unnecessary worry from the teachers, and yet retain promise enough of reward to appeal to the most ambitious. Each teacher may then strive to acquire special skill in her work, and may know that hard conscientous work at all times will undoubtedly not go entirely unrewarded.

5. Salary Schedules Should Not Make a Distinction Between the Different School Divisions.

At the present time, all salary schedules make a marked distinction between the salaries for elementary, intermediate and high school teachers. Tables XXX–XXXV in Chapter I show for the cities reporting minimal and maximal salaries the decided tendency to establish lower minimal and maximal salaries for elementary teachers than for intermediate teachers, and lower for the intermediate teachers than for high school teachers. The medians for the minimal salaries are: elementary $609, intermediate $718, high school $837, and for the maximal salaries, elementary $867, intermediate $933 and high school $1,358. In addition to the lower salaries scheduled, it is also obvious from these tables that the range between the minimum and maximum is much smaller for the elementary teachers. An examination of the replies from the superintendents makes this more pronounced than the medians indicate. Of 151 cities below 10,000 inhabitants which gave both the minimum and maximum for elementary teachers, six per cent report a difference between the minimal and maximal salary of $50 or less, 24 per cent a difference of $100 or less, 64 per cent a difference of $200 or less and 85 per cent a difference of $300 or less. This means that in more than three-fifths of the cities in Size Groups V and VI the elementary teacher cannot look forward to earning more than $200 per year more than when she begins. This is certainly

one of the chief reasons why teachers stay so short a time in the smaller places. Many teachers would assuredly stay in the village school where they have achieved success if to do so it did not mean both a present sacrifice of money and a lack of future prospects.

The reason for this difference is the lack of preparation of so many of the elementary teachers in comparison with the high school teachers. This was particularly true twenty or twenty-five years ago, but the difference in preparation has decreast materially during the past decade. Where the standards are as definitely set at six and eight years of work above the eighth grade for the elementary and the high schools (as shown by Tables XLVII, XLVIII and XLIX), it does not show a present difference which would warrant the amount of distinction made in all salary schedules. Table XL, which showed that a number of superintendents expect elementary teachers to pay less for "board and room" than high school teachers, was another evidence of the difference existing between these school divisions. When this distinction is made in salary and in social status, there is no doubt that the distinction carries over to the educational relations as well. This is an unfortunate situation, and one which would be removed by putting elementary, intermediate and high school teachers upon the *same salary schedule as soon as they meet the same standards of preparation.* Who can say that any one of these divisions is more necessary or important than another, and consequently, why should the distinction be made either in amount of preparation considered necessary or in the salary paid? There is a strong movement in the country at the present time toward this standard. Several of the normal schools have become, or are planning to become, teacher-training colleges with full four years of professional work, while others are introducing a third year's work as a step toward this standard. The equal preparation of the teachers in all three of the school divisions and equal rewards for service, equally important to the welfare of the nation, is a condition highly to be desired.

6. Salary Schedules Should Be Standardized.

The need for this is especially felt in regard to schedules as they are influenst by such elements as the size of the city, the location of the city, the preparation of the teachers, and the previous experience of the teachers. Under existing conditions the smaller communities can not hope to compete for teachers with the larger cities. The smaller community is compelled to accept the inexperienst or the less competent, for as soon as the necessary experience is obtaind or as soon as a teacher demonstrates markt ability she is drawn to a larger place by the larger salaries paid. Exactly the same situation exists

among different sections of the country, where the differences in the salaries offered are as great as the differences among cities of different sizes. Tables I–VIII in Chapter I show these discrepancies. The effect of location is not as markt as that of the size of the city, however, due to the added expense of travel, yet to the extent that it does exert an influence it sends the better teachers to the sections paying better salaries.

The majority of salary schedules at the present time either discount or discredit entirely the experience a teacher has gained in other systems, at least as far as it gives her an advanst place on the salary schedule. This practice, while it offers no inducement for remaining with the same school system, at least puts a penalty upon moving. As a consequence many teachers will not move when it would be to their advantage, unless the difference in salary offered is enough to make the lower ranking due to discredited experience. With the standardization which has already been made in matters of preparation, if school officials could reach some agreement on this matter so that teaching experience could be accepted year for year where it is comparable, it would do much to unite teachers into a profession and also to destroy the restricting local influences which so predominate in many systems. In determining what experiences are comparable there seems to be no reason why, when preparation or training are equivalent, that any experience in public schools in the same divisions (elementary, intermediate, or high school) should not be taken at full value. If a teacher is *good enough* to be elected to the teaching corps of a given city, it would indicate that her past teaching experience, even if in a rural or village school, was probably *good enough* to be counted in placing her upon the salary schedule.

Suggested Standards for Salary Schedules

In the light of the above described elements and existing conditions the following standards are suggested. These are higher than common practice but are not higher than has already been accomplisht in some of our more progressive cities. The division of the cities into two size groups is justified by the results shown in Tables I–IV, inclusive. There is a noticeable break in salary paid between cities in size III and in size IV, while if the average of the medians for cities in size groups I, II and III is compared with the average for the cities in size groups IV, V and VI, there is a difference of approximately the $200 which has been made in the following table. Of course there can not be a clear cut line drawn between a city say of 28,000 inhabitants falling in size group III and one of 23,000 in group IV, and many cities in the lower group will pay salaries as high

as those in the upper group which will be more to their credit than to have a larger city remain on the lower level.

SUGGESTED STANDARDS FOR SALARY SCHEDULES

Amount of Professional Preparation	For City Sizes[1] I[2], II & III			For City Sizes[1] IV, V & VI		
	Minimal Salary	Annual Increases	Maximal Salary	Minimal Salary	Annual Increases	Maximal Salary
Teachers						
Normal Diploma[3]	$1200	6 x$100	$1800	$1000	6 x$100	$1600
A. B. Degree	1400	10 x 100	2400	1200	10 x 100	2200
A. M. Degree	1600	10 x 100	2600	1400	10 x 100	2400
Ph. D. Degree	2000	10 x 100	3000	1800	10 x 100	2800
Heads of Departments[4] in Intermediate or High School						
Normal Diploma	$1600	8 x 100	$2400	$1400	8 x$100	$2200
A. B. Degree	1800	10 x 100	2800	1600	10 x 100	2600
A.M.Degree	2000	10 x 100	3000	1800	10 x 100	2800
Ph.D. Degree	2400	10 x 100	3400	2200	10 x 100	3200
Special Supervisors						
Normal Diploma	$1300	8 x$150	$2500	$1100	8 x$150	$2300
A.B. Degree	1500	10 x 150	3000	1300	10 x 150	2800
A.M. Degree	1700	10 x 150	3200	1500	10 x 150	3000
Ph.D. Degree	2100	10 x 150	3600	1900	10 x 150	3400
Principals						
Elementary (15 rooms or less).						
Normal Diploma	$1800	4 x$200	$2600	$1600	4 x$200	2400
A.B. Degree	2000	5 x 200	3000	1800	5 x 200	2800
A.M. Degree	2200	6 x 200	3400	2000	6 x 200	3200
Ph.D. Degree	2600	7 x 200	4000	2400	7 x 200	3800
Elementary (16 rooms or more), Intermediate or High School (with an enrollment of less than 500.)						
Normal Diploma	$2200	4 x$200	$3000	$2000	4 x$200	$2800
A.B.Degree	2600	5 x 200	3600	2400	5 x 200	3400
A.M. Degree	2800	6 x 200	4000	2600	6 x 200	3800
Ph.D. Degree	3200	7 x 200	4600	3000	7 x 200	4400
Intermediate (500 or more), High School (Between 500 and 1200)						
Normal Diploma	$2800	4 x$200	$3600	$2600	4 x$200	$3200
A.B. Degree	3200	5 x 200	4200	3000	5 x 200	4000
A.M. Degree	3400	6 x 200	4600	3200	6 x 200	4400
Ph.D. Degree	3800	7 x 200	5200	3600	7 x 200	5000
High School (Between 1200 and 2500)						
A.B. Degree	$3600	5 x$200	$4600	$3400	5 x$200	$4400
A.M. Degree	3800	6 x 200	5000	3600	6 x 200	4800
Ph.D. Degree	4200	7 x 200	5600	4000	7 x 200	5400
High School (2500 or more)						
A.B. Degree	$4000	5 x$200	$5000	$3800	5 x$200	$4800
A.M. Degree	4200	6 x 200	5400	4000	6 x 200	5200
Ph.D. Degree	4600	7 x 200	6000	4400	7 x 200	5800

[1] For explanation of the size groups see page 9

[2] Large cities e. g. over 1,000,000, could add $100 or more to the above schedules to cover the additional cost of living

[3] Normal diploma as used here is meant to represent graduation from a standard normal school with two years work beyond the completion of four years high school, six years beyond the eight grade.

[4] Heads of departments are assumed to have at least three years of teaching experience before receiving the minimum.

Suggestions for Administering the Above Schedule

a. A teacher when elected should be placed on the salary level to which her training and experience would entitle her.

b. When a teacher changes her classification by being promoted in

responsibility or by earning an advanst degree she should be placed upon the new schedule at the place where her present salary would place her and be entitled to as many more increases as are open to her between that point and the new maximum. For example, in a size II city a teacher with six years' training receives four increases and then secures an A. B. degree. Her salary on the first schedule would be $1,600, which would be the same as if she had received two increases on the new schedule and she would be entitled to eight more—a total of twelve increases in all.

c. Where it is desirable to pay some teachers more than the schedule would call for or more than the maximum provided, some of the devices previously discust under "Elements of Flexibility in Salary Schedules" should be used.

d. Provision has not been made in the above schedule for different salaries for men and women because of the growing tendency not to make such distinctions. Where, however, it is desired to make such a difference the salaries for men should be set in excess of the standards above mentioned rather than to make them the standards for men and lower them for the women teachers. The above salaries are not more than enough to provide a living saving wage for teachers and at the same time induce the stronger men and women to enter and remain in the profession.

e. The introduction of the above schedule should not be allowed in any case to decrease any salaries, but if a teacher is receiving a salary in excess of the maximum which she is entitled to because of her preparation she should not receive further increases without additional preparation or special work.

f. The suggested schedule does not make elaborate distinctions between different kinds of work, e. g., ungraded rooms, tubercular, etc. If in any city this seems advisable it will be possible to make a schedule between any of the above standards. This, however, only makes more "classes" of teachers and could be better handled by paying an extra amount for different kinds of work requiring extra preparation or which is in any way more difficult to perform.

g. Care should be taken to safeguard the granting of increases so that they will not become automatic with increasing tenure. Any year when an increase is not earned or when a partial increase is earned should not decrease the possible maximum attainable by that teacher.

Teachers' Salaries and Public Interest

Most of the elements which keep teaching from being a profession in the truest sense can be remedied only thru better salaries for

teaching. Better salaries for teachers will not come until salary schedules are generally used and based upon more generally accepted standards than at the present time. This needed reform will not be accomplisht until teachers become intelligently interested and active in the matter. Among a great many people the handed-down feeling that teaching as a means of earning a living is more respectable, e. g., than the more remunerative work in some factory, has made many women, particularly, stay in teaching in spite of its poor rewards. They often excuse their poorer clothes and financial restrictions by thinking of the rewards which come to a teacher in her old age in the contemplation of hundreds of grateful pupils grown to manhood and womanhood under the benign influence of ideals imparted in her classes, a pretty romance which should end "and they all lived happily ever after" but which is more liable to end in a pauperized old age.

Teachers' salaries have always been so relatively low that salary campaigns have been made on the basis of financial justice in order that teachers might even exist. The increases which have been given have never been large enough to enable the teachers to give much more service or the people to demand more in return for the additional salary. The need of more money for necessary expenses is still an important factor in this country, but salaries are also reaching the level in some states and a number of cities, and the increases are large enough to allow a margin of saving. When this stage is reacht it is not only possible, but entirely proper, for the public to demand more from the teachers in return—more extensive preparation, more careful performance of duties, and more growth during service. Much of the agitation which has been created in favor of better salaries has been near-sighted in that it was aimed primarily at the betterment of the salaries of those already teaching and not for the purpose of encouraging more people to enter, or those who do, to prepare themselves better. In other words, salary campaigns have often been selfish rather than professional. In most cases, however, teachers have been too reticent about their work—too ready to toil on and wait for society to reward them adequately. They have allowed others to tell what the teachers should do and receive and have made no protest. —at least no protest loud enough to be heard away from the boarding-house table,—and have resorted neither to the power of numbers nor to the force of an awakened public opinion.

There are far too many citizens in this country uninformed as to the work of the schools and the present cost of that work. These men and women are too ready to give expression to opinions based upon their lack of information, and these opinions find a much too ready acceptance. The following letter appearing on the editorial page of

one of the leading Western newspapers is but typical of hundreds of others which are given similar publicity and which meet with too much public approval.

Too Much is Spent on Schools

WRITER OPPOSES RAISE OF TEACHERS' PAY AND SUGGESTS FEWER HIGH SCHOOLS

Oregonian, April 22, 1919.—(To the Editor)—I see by paper that teachers want more pay and a special election to be called. Said salary raise was voted down last November at an election costing $15,000, and now they have the nerve to call another election.

I am in favor of an election if these teachers will pay for it, but otherwise not. They are the best paid women in the city, have shortest hours, easy work and are not satisfied. As a taxpayer I think I voice the sentiment of many. If they are not satisfied, let them do other work or else let the taxpayer close the schools, particularly high schools, as it is a waste of time and money and does not prepare one for the world, only for college of which we have too many now.

These schools are our biggest item of expense, costing the awful sum of $3,000,000 every ten months, which shows a great waste somewhere. I am now more convinst than ever, to be taxpayer and property owner (of which these teachers are neither, not paying income or any other taxes or helping to build up a city) is to be workt to a finish. It is high time the taxpayers' eyes are opened to the demands and expectations. He gives too much for nothing and people are never satisfied.

Why does this man not know more about the schools? Why are there thousands of voters in that city who agree with him?

Our twentieth-century life has become so complex, so specialized, that we can no longer hope to have "everybody" interested in "everything." To be sure, the schools represent an institution of more immediate interest to a greater number of people than any other, save the home, but even with this as an incentive, people will not inform themselves about the schools unless it is made interesting and easy for them to do so, or unless they are made in some way to realize that it is their social duty to do so. The responsibility for bringing one or both of these things to pass must rest upon teachers themselves. It has rested there and is now resting there—resting quietly in a sleep like that of Rip Van Winkle, deep, dense and lasting. It is time for the effects of the draughts from the flagons of lassitude and indifference to have worn off. The profession must awake to the realization that many changes have occurred in the past twenty-five years, in the past five years. Methods of teaching have changed, standards of preparation have advanst, the cost of living has advanst out of proportion to the advance in salary, and the community interest in the schools has changed—changed from the personal-individual interest

to a more impersonal interest in the social efficiency of the school system.

Teachers in many places have allowed themselves to become estranged from the public and from school patrons. Then when they are forced to realize that they can no longer meet their educational, social, and hygienic responsibilities upon the salaries received, they realize that this estrangement from the public is an obstacle to the recognition of their claims. They now face the task of justifying their claims by justifying their work and its results, as well as re-establishing the cordial relationships which make for mutual understanding and coöperation.

In order to do this it is necessary for teachers to *know* their own work, *know* its importance to social welfare, and consciously strive to interest the people of the community in *their* school and its problems, and interest them in such a way that they will insist upon having the *best* for their children and be willing to support the schools in such a way that this best may be secured.

Teachers must insist upon adequate pay in order that the work of education may meet its present-day obligations, but it is no longer necessary to wage campaigns for increast salaries solely upon the basis of sentiment or justice to an opprest class. The case can be presented on its merits, and where campaigns have been vigorously made on the principle of educating the community on matters concerning the school to the point that they are able to recognize needs, they have almost always been sucecssful. In such campaigns it is intended that this study of salaries and salary schedules not only will be suggetive of the kind of material to secure but will contain many facts and tables which will furnish material for comparisons with local conditions.

The need for higher salaries has been proved from so many different angles that there are facts available for arguments in practically every situation. In any city waging an educative campaign for higher salaries it is possible for those in charge of the publicity to compare the salaries paid in that city with the median salaries paid in other cities of the same size. Comparisons can be made with the wages paid in other occupations. The expenses may be easily shown to demand all or nearly all of the salaries. The amount of preparation demanded may be compared with the preparation in other positions in the same community paying as much or more salary. The inability of teachers to attend summer schools and other forms of professional advancement, to say nothing of any margin for saving, can be convincingly shown by a typical teacher's budget on the basis of twelve months.

When facts like these are clearly shown and given the necessary

amount of "local color" to attract attention and appeal to "local pride," there is little doubt but that the public will see the situation in its true light and *demand* an adjustment which is not only just but which will insure the best possible training for all children.

Today we face an emergency—educational and social—which is not only going to put the democracy we fought to win, save, and perpetuate, on trial, but which in many ways is going to test the power to endure of even civilization itself. It will not be solved by statesmen, politicians, financiers, labor leaders, nor agitators. It will not be solved by the present generation of citizens, who will be able only to make temporary settlements which will serve as experiments. The real solution will not, and can not, come until some of these experiments are made and evaluated by a people trained to think in the light of new ideals of service and social values.

The responsibility, then, for the solution of the many problems of reconstruction rests with the teachers of the next decade. Never was such a responsibility placed upon any class in any society, and how unprepared they are to undertake it has been repeatedly shown during the last four years. If this emergency is to be met and civilization enabled not only to endure but to progress, it can not be done by immature, unprepared, and underpaid teachers. These conditions will be removed when a united teaching profession can bring an interested informed public to demand the highest degree of educational efficiency, and as the essential to that efficiency, to provide for every teacher a living and a saving wage.

APPENDIX I

List of Cities Returning the Superintendents' Questionnaire [1]

*Cities whose returns came too late for general study.
**Counties.

	State	City	State	City
AI				
	Conn.	Bridgeport	Conn.	New Haven
	Mass.	Fall River	Mass.	Lynn
	Mass	Worcester	N. J.	Jersey City
	*N. J.	Newark	N. J.	Trenton
	*N. Y.	New York	*Pa.	Pittsburgh
	Pa.	Scranton		
BI				
	D. C.	Washington	La.	New Orleans
	Md.	Baltimore	Tenn.	Nashville
	Va.	Richmond		
CI				
	*Ind.	Indianapolis	*Mich.	Grand Rapids
	Ohio	Dayton		
DI				
	*Iowa	Des Moines	Minn.	Minneapolis
	Mo.	St. Louis		
EI				
	Calif.	Oakland	*Oregon	Portland
	Utah	Salt Lake City	Washington	Seattle
	Wash.	Spokane		
AII				
	Conn.	New Britain	*Conn.	Waterbury
	Mass.	Holyoke	Mass.	Brockton
	N. Y.	Schenectady	N. J.	Passaic
	Pa.	Allentown	N. Y.	Yonkers
	Pa.	Harrisburg	Pa.	Erie
BII				
	Ark.	Little Rock		
	**Ga.	Chatham County	Ga.	Augusta
	Ga.	Savannah	**Md.	Allegany County
	S. C.	Charleston		
CII				
	Ill.	East St. Louis	*Ill.	Springfield
	*Mich.	Flint	Ohio	Springfield
DII				
	Kansas	Kansas City	*Minn.	Duluth
	Mo.	St. Joseph	Okla.	Oklahoma City
EII				
	*Calif.	Berkeley	Calif.	San Diego
	Colo.	Pueblo		
AIII				
	Conn.	Stamford	Conn.	Norwich
	Mass.	Pittsfield	Maine	Lewiston
	N. J.	Montclair	*Mass.	Waltham

[1] For copy of questionnaire see insert after page 7.

State	City	State	City
N. Y.	Jamestown	N. J.	Orange
N. Y.	Newburgh	N. Y.	Kingston
Pa.	Newcastle	Pa.	Chester
W. Va.	Wheeling	Pa.	Williamsport
BIII			
Ark.	Fort Smith	Ky.	Paducah
**Md.	Dorchester Co.	**Md.	Carroll County
Texas	Waco	N. C.	Durham
CIII			
Ill.	Moline	Ind.	East Chicago
Mich.	Battle Creek	Mich.	Highland Park
Mich.	Jackson	Mich.	Lansing
Ohio	Zanesville	Wis.	La Crosse
Wis.	Oshkosh	Wis.	Sheboygan
Wis.	Superior		
DIII			
Iowa	Council Bluffs	Iowa	Dubuque
Nebr.	Lincoln	Okla.	Tulsa
EIII			
Calif.	Fresno	Calif.	Pasadena
Calif.	San Jose	Calif.	Stockton
Idaho	Boise	Utah	Ogden City
Wash.	Bellingham	Wash.	Everett
Wash.	Walla Walla		
AIV			
Conn.	Ansonia	Conn.	Bristol
Conn.	Willimantic	Conn.	Torrington
Maine	Augusta	Maine	Biddeford
Maine	Sanford	Mass.	Beverly
Mass.	Easthampton	Mass.	Framingham
Mass.	Greenfield	Mass.	Methuen
Mass.	Winchester	N. H.	Berlin
N. H.	Laconia	N. J.	Asbury Park
N. J.	Hackensack	N. J.	Millville
N. J.	North Bergen	N. J.	Phillipsburgh
N. J.	Plainfield	N. Y.	Fulton
N. Y.	Gloversville	N. Y.	Little Falls
N. Y.	Plattsburg	N. Y.	Watervliet
Pa.	Lewiston	Pa.	Bristol
Pa.	Phoenixville	Pa.	Meadville
Pa.	Wilkinsburg	Pa.	Taylor
BIV			
Ala.	Bessemer	Florida	Volusia County
Ga.	Albany	Ga.	Rome
Md.	Talbot County	S. C.	Spartanburg
Texas	Tyler	W. Va.	Bluefield
W. Va.	Fairmont	W. Va.	Moundsville
W. Va.	Parkersburg		
CIV			
*Ill.	Alton	Ill.	East Aurora
Ill.	Freeport	Ill.	Granite City

	State	City	State	City
	Ill.	Galesburg	Ill.	Jacksonville
	Ill.	Highland Park	Ill.	La Salle
	Ill.	Kankakee	Ill.	Streator
	Ind.	Mishawaka	Mich.	Holland
	Mich.	Marquette	Mich.	Pontiac
	Mich.	Traverse City	Ohio	Cambridge
	*Ohio	Chillicothe	Ohio	Cleveland Heights
	Ohio	Coshocton	Ohio	Elyria
	Ohio	Marion	Ohio	Mt. Vernon
	Ohio	Norwood	Ohio	Warren
	Wis.	Eau Claire	Wis.	Marinette
DIV			Wis.	Wausau
	Iowa	Ottumwa	Kansas	Hutchinson
	Okla.	Ardmore	Kansas	Salina
	Kansas	Pittsburg	Minn.	Red Wing
	Nebr.	Grand Island	N. Dak.	Grand Forks
	S. Dak.	Aberdeen	S. Dak.	Sioux Falls
EIV				
	Ariz.	Phoenix	Calif.	Eureka
	Calif.	Riverside	Calif.	Santa Ana
	Calif.	Long Beach	Calif.	Vallejo
	*Calif.	Santa Barbara	Idaho	Pocatello
	Mont.	Anaconda	Mont.	Missoula
	Mont.	Great Falls	Oregon	Salem
	N. Mex.	Choves County		
AV				
	Conn.	Derby	Conn.	Putnam
	Maine	Fort Kent, St. John	Maine	St. Francis Allagast
	Maine	Gardiner	Maine	Norway
	Maine	Rockland	Maine	Westbrook
	Mass.	Amherst	Mass.	Concord
	Mass.	Orange	Mass.	Rockland
	Mass.	Saugus	Mass.	Stoughton
	Mass.	Wellesley	Mass.	Westborough
	Mass.	Whitman	N. H.	Derry
	N. J.	Burlington	N. J.	Essex
	N. J.	Ridgewood	N. Y.	Albion
	Pa.	Corry	Pa.	Ambridge
	Pa.	East Pittsburgh	Pa.	Donora
	Pa.	Indiana	Pa.	Huntingdon
	Pa.	Juniata	Pa.	Jersey Shore
	Pa.	Munhall	Pa.	Millvale
	Vt.	Rockingham	Vt.	Chittenden County
BV				
	Fla.	Seminole	Ark.	Texarkana
	Ga.	Dublin	Miss.	Yazoo City
	Tenn.	Park City	Texas	Orange
	*W. Va.	Elkins		
CV				
	Ill.	Beardstown	Ill.	Belvidere
	Ill.	Duquoin	Ill.	Herrin

	State	City	State	City
	Ill.	La Grange	Ill.	Madison
	Ill.	Paris	Ind.	Princeton
	Mich	Boyne City	Mich.	Dowagiac
	Mich.	Cheboygan	*Mich.	Ypsilanti
	*Ohio	Athens	Ohio	Bucyrus
	Ohio	Bellefontaine	Ohio	Nelsonville
	*Ohio	Delaware	Ohio	Troy
	Ohio	Salem	Wis.	Chippewa Falls
	Wis.	Antigo	Wis.	Neenah
	Wis.	Menasha	Wis.	Watertown
	Wis.	Stevens Point	Wis.	West Allis
DV				
	Kans.	Galena	Kans.	Junction City
	Kans.	Rosedale	Kans.	Wellington
	Minn.	Eveleth	Mo.	Carthage
	Nebr.	Fremont	Nebr.	Kearney
	Nebr.	Nebraska City	N. Dak.	Minot
	Okla.	Bartlesville	Okla.	Durant
EV				
	Ariz.	Prescott	Calif.	Alhambra
	*Calif.	Hanford	Calif.	San Luis Obispo
	Colo.	Grand Junction	*Mont.	Bozeman
	N. Mex.	Santa Fe	Oregon	Baker
	Utah	Logan City	Wash.	Centralia
AVI				
	Conn.	Essex	Conn.	Litchfield
	Conn.	New Canaan	Conn.	Seymour
	Conn.	Southington	*Conn.	Westport
	Maine	Cumberland Co.	Mass.	Dalton
	Mass.	Manchester	Mass.	Sutton
	Mass.	Swansea,	*Mass.	Warren
	Mass.	Westport	N. H.	Exeter
	*N. J.	Bordentown	N. J.	Edgewater
	*N. J.	Haledon	N. J.	Hunterdon
	N. J.	Prospect Park	N. J.	Wharton
	N. J.	Woodbury	N. J.	Newton
	N. Y.	Baldwinsville	N. Y.	Carthage
	N. Y.	Clyde	N. Y.	Cornwall
	N. Y.	Dobbs Ferry	N. Y.	Frankfort
	*N. Y.	Lowville	N. Y.	Lyons
	N. Y.	Mount Morris	N. Y.	Patchoque
	N. Y.	Perry	N. Y.	Saranac Lake
	N. Y.	Scotia	N. Y.	Sidney
	N. Y.	Silver Creek	*N. Y.	Suffern
	N. Y.	Wellsville	Pa.	Birdsboro
	Pa.	Barnesboro	Pa.	Ford City
	Pa.	Delaware	Pa.	Jefferson
	Pa.	Grove City	Pa.	Mauch Chunk
	Pa.	Leechburg	Pa.	Northumberland
	Pa.	Nazareth	Pa.	Renovo
	Pa.	Parsons	Pa.	Slatington

State	City	State	City
Pa.	Verona	Pa.	South Fork
*Pa.	Williamstown	Vt.	Franklin
Vt.	Springfield		
BVI			
Ala.	Girard	Ala.	Ofseliban
Ala.	Sheffield	*Ala.	Troy
Ark.	Fordyce	Fla.	Orlando
Ky.	Ludlow	S. C.	Abbeville
Tenn.	Lenoir	Texas	Bay City
Texas	Jacksonville	Texas	Plainview
Texas	Stamford	Va.	Lexington
CVI			
Ill.	Bushnell	Ill.	Cooksville
Ill.	Farmer City	Ill.	Harrisburg
Ill.	Lake Forest	Ill.	Lockport
Ill.	Morris	Ill.	Naperville
Ill.	Robinson	Ill.	Venice
Ind.	Auburn	Ind.	Angola
Ind.	Decatur	Ind.	Franklin
Ind.	Kendallville	Ind.	North Vernon
Ind.	Rochester	Ind.	Warsaw
Mich.	Greenville	Mich.	Gladstone
Mich.	St. Johns	Mich	Onaway
Ohio	Crooksville	Mich.	Crystal Falls
Ohio	Kent	Ohio	East Palestine
Ohio	Shelby	Ohio	Medina
Wis.	Two Rivers	Wis.	Kaukauna
DVI			
Iowa	Chariton	Iowa	Cherokee
Iowa	Eagle Grove	Iowa	Indianola
Kans.	Beloit	Kans.	Cherryvale
Kans.	Horton	Kans.	Larned
Kans.	Neodesha	Kans.	Osawatomie
Minn.	St. Peter	Minn.	Staples
Minn.	Wabasha	Minn.	Waseca
Mo.	Excelsior Springs	Mo.	Kirkwood
Mo.	Monette	*Mo.	Slater
N. Dak.	Dickinson	N. Dak.	Jamestown
Okla.	Frederick	Okla.	Woodward
S. Dak.	Redfield		
EVI			
Calif.	Emeryville	Calif.	Tulare
Calif.	Monrovia	Calif.	Nevada City
Calif.	Oroville	Calif.	Red Bluff
Colo.	Alamosa	*Colo.	Montrose
Colo.	Salida	Idaho	Nampa
Idaho	Weiser	Mont.	Havre
Mont.	Miles	Nev.	Tonopah
N. Mex.	Raton	Oregon	Albany
Wash.	Ellensburg	Wash.	Kittitas
Wash.	Pullman	Wash.	Renton
Wyoming	Evanston		

APPENDIX II

LIST OF CITIES AND COUNTIES FROM WHICH REPLIES TO TEACHERS' QUESTIONNAIRE[1] WERE RECEIVED. Arranged Alphabetically by States and Cities with the size group and number of replies indicated for each city.

State & City	Size Group	No. of Replies
Alabama	(B)	
Troy	VI	25
Arizona	(E)	
Phoenix	IV	30
Prescott	V	98
Arkansas	(B)	
Fort Smith	III	33
California	(E)	
Alhambra	V	70
Bakersfield	IV	55
Berkeley	II	150
Eureka	IV	48
Fresno	III	200
Long Beach	III	150
Monrovia	VI	21
Oakland	I	550
Pasadena	III	80
Red Bluff	VI	13
Riverside	IV	241
San Jose	III	4
Santa Ana	IV	71
Santa Monica	V	50
Tulare	VI	20
Colorado	(E)	
Colorado Springs	III	1
Denver	I	53
Montrose	VI	50
Pueblo	II	104
Salida	VI	33
Connecticut	(A)	
Ansonia	IV	12
Collinsville	VI	1
Enfield	IV	2
Essex	VI	2
Farmington	VI	8
Litchfield	VI	9
New Britain	II	55
Norwich	III	83
Old Saybrook	VI	1
Seymour	VI	2
Southington	VI	12
Stamford	III	156
Thomasville	VI	3
Torrington	IV	90
Unionville	VI	3
Westport	VI	30
Florida	(B)	
Altamonte Springs	VI	1
Apopka	VI	5
Chuluota	VI	1
Forest City	VI	1
Geneva	VI	3
Koloku	VI	1
Lake Monroe	VI	1
Lockbart	VI	1
Longwood	VI	4
Maitland	VI	2
Ocokee	VI	1
Orlando	VI	1
Oviedo	VI	11
Paola	VI	1
Pine Castle	VI	1
Sanford	VI	28
Tangerine	VI	1
Wintergarden	VI	2
Zellwood	VI	1
Georgia	(B)	
Augusta	II	113
Idaho	(E)	
Boise	III	87
Nampa	VI	30
Illinois	(C)	
Aurora	III	30
Belvidere	V	55
Canton	IV	30
Carterville	VI	13
Decatur	III	150
East St. Louis	II	71
Farmer City	VI	12
Freeport	IV	66
Galesburg	IV	75
Granite City	IV	50
Herrin	V	43
Hillsboro	VI	30

[1] For copy of questionnaire see page 8.

State & City	Size Group	No. of Replies
Lake Forest	VI	20
La Salle	IV	18
Lockport	VI	75
Madison	V	18
Naperville	VI	20
Ottawa	V	25
Rock Island	III	122
Streator	IV	16
Venice	VI	11
Indiana	(C)	
Anderson	IV	7
Crawfordsville	IV	50
Decatur	VI	26
East Chicago	III	59
Franklin	VI	6
Gary	IV	3
Goshen	V	49
Indianapolis	I	2
Kendallsville	VI	20
Madison	V	30
Mishawaka	IV	75
Vincennes	IV	71
Iowa	(D)	
Cedar Rapids	III	4
Clinton	III	28
Des Moines	I	225
Eaglegrove	VI	1
Indianola	VI	1
Oelwein	V	45
Ottumwa	IV	120
Kansas	(D)	
Abilene	VI	25
Beloit	VI	1
Galena	V	10
Horton	VI	23
Hutchinson	IV	75
Junction City	V	40
Leavenworth	IV	20
Osawatomie	VI	25
Topeka	III	11
Wellington	V	167
Kentucky	(C)	
Paducah	III	83
Maine	(A)	
Augusta	IV	100
Gardiner	V	6
Gorham	V	4
Lewiston	III	20
Norway	VI	13
Oxford	VI	3
Portland	II	4
Rockland	V	12
Sanford	IV	27
South Paris	VI	2
Springvale	VI	2
Waterford	VI	4
Maryland	(B)	
Baltimore County	I	1
Carroll County	IV	88
Easton & vicinity	VI	32
Western Maryland	VI	60
Massachusetts	(A)	
Amherst	V	33
Andover	V	10
Arlington	IV	6
Barre	VI	14
Beverly	IV	75
East Hampton	IV	17
Fall River	I	40
Gilbertville	V	1
Greenfield	IV	4
Saugus	V	25
Manchester	VI	5
Methuen	IV	50
Northampton	IV	1
Petersham	VI	7
Somerset	VI	8
Springfield	I	200
Swansea	VI	4
Waltham	III	50
Wellesley	V	14
Whitman	V	21
Worcester	I	10
Michigan	(C)	
Allegan	VI	33
Battle Creek	III	100
Cheboygan	V	31
Crystal Falls	VI	50
Dowagiac	V	35
Grand Ledge	VI	24
Greenville	VI	16
Highland Park	III	125

State & City	Size Group	No. of Replies
Holland	IV	25
Ironwood	IV	89
Lansing	III	30
Marquette	IV	53
Onaway	VI	17
Pontiac	IV	105
River Rouge	VI	27
Saginaw	II	130
St. Johns	VI	13
Traverse City	IV	67
Ypsilanti	V	35
Minnesota	(D)	
Albert Lea	V	25
Brainerd	V	24
Duluth	II	320
Little Falls	V	37
Montevideo	VI	20
Red Wing	IV	50
Stillwater	V	25
St. Paul	I	10
St. Peter	VI	20
Wabasha	VI	15
Waseca	VI	9
Winona	IV	75
Mississippi	(B)	
Yazoo City	V	10
Missouri	(D)	
St. Joseph	II	175
Montana	(E)	
Great Falls	IV	96
Lewistown	VI	7
Miles City	VI	34
Missoula	IV	43
Nebraska	(D)	
Alliance	VI	27
Falls City	VI	25
Kearney	V	34
Lincoln	III	250
Nevada	(E)	
Tonopah	VI	9
New Hampshire	(A)	
Portsmouth	IV	30
New Jersey	(A)	
Asbury Park	IV	84
Bordentown	VI	11
Burlington	V	6
Edgewater	VI	10
Garfield	IV	6
Granton	VI	1
Hackensack	IV	70
Haledon	VI	18
Irvington	IV	78
Millville	IV	77
Montclair	III	168
Newton	VI	30
North Bergen	IV	100
Passaic	II	63
Phillipsburg	IV	12
Plainfield	IV	139
New Mexico	(E)	
Las Cruces	VI	29
Raton	VI	13
Roswell	V	196
Santa Fe	V	40
New York	(A)	
Albion	V	29
Carthage	VI	8
Dobbs Ferry	VI	14
Fulton	IV	66
Jamestown	III	88
Le Roy	VI	14
Mt. Morris	VI	13
Newburgh	III	50
Patchogue	VI	30
Plattsburg	IV	29
Saranac Lake	VI	40
Silver Creek	VI	11
Suffern	VI	25
Syracuse	I	18
Walton	VI	30
Watervliet	IV	32
Wellsville	VI	24
North Carolina	(B)	
Durham	III	42
Greensboro	IV	100
North Dakota	(D)	
Dickinson	VI	25

State & City	Size Group	No. of Replies
Ohio	(C)	
Athens	V	15
Bellefontaine	V	30
Cambridge	IV	50
Chillicothe	IV	25
Cleveland Heights	IV	64
Columbus	I	375
Crooksville	VI	20
Delaware	V	35
East Palestine	VI	1
Elyria	IV	50
Gallipolis	V	20
Lima	III	50
Kent	VI	41
Mansfield	IV	100
Mt. Vernon	IV	37
Nelsonville	V	31
Norwood	IV	50
Shelby	VI	18
Zanesville	III	21
Oklahoma	(D)	
Bartlesville	V	50
Durant	V	1
Guthrie	IV	60
Tulsa	III	238
Oregon	(E)	
Albany	VI	25
Baker	V	34
Dalles	VI	20
Salem	IV	33
Pennsylvania	(A)	
Ambridge	V	48
Birdsboro	VI	20
Carry	V	20
Conshohocken	V	31
Duryea	V	25
Erie	II	5
Ford City	VI	9
Freedom	VI	20
Jersey Shore	V	27
Johnstown	II	229
Juniata	V	25
Kittanning	VI	1
Mauch Chunk	VI	4
Millvale	V	16
Nazareth	VI	15
Oakmont	VI	4
Punxstawney	VI	36
Renovo	VI	15
Scranton	I	300
Sidman	VI	1
South Fork	VI	15
Verona	VI	7
Williamsport	III	75
South Carolina	(B)	
Charleston	II	91
Spartanburg	IV	39
South Dakota	(D)	
Aberdeen	IV	67
Sioux Falls	IV	50
Texas	(B)	
Austin	III	60
Bay City	VI	1
Tyler	IV	50
Utah	(E)	
Logan	V	34
Odgen	III	69
Salt Lake City	I	1
Vermont	(A)	
Bellows Falls	VI	6
Rutland	IV	100
Virginia	(B)	
Hewlett	VI	1
Lexington	VI	2
Richmond	I	300
Washington	(E)	
Aberdeen	IV	1
Bellingham	III	120
Centralia	V	47
Everett	III	50
Pullman	VI	17
Renton	VI	26
Roslyn	VI	22
Seattle	I	500
Spokane	I	25
Walla Walla	III	65
Wisconsin	(C)	
Eau Claire	IV	75

State & City	Size Group	No. of Replies
Kaukauna	VI	28
La Crosse	III	71
Menasha	V	25
Merrill	V	35
Neenah	V	41
Plymouth	VI	1
Sheboygan	III	100
Superior	III	14
Two Rivers	VI	26
West Allis	V	60
Wyoming	(E)	
Evanston	VI	5
Sheridan	IV	40

APPENDIX III

A coefficient of correlation is an index of the closeness of relation between two items. It is represented by values of "r" which range from + 1.00 (perfect relation) where a given rank or position in one item always goes with the same rank or position in the other item; thru the intermediate values to .0 (chance relation) where it is purely chance whether a given rank or position in one item will go with the same rank or position in the other item; thru the intermediate values to — 1.00 where a given rank or position of one item always goes with the opposite of that rank or position in the other item. Thus, a coefficient of correlation between "salary received" and "experience" of r = + 1, would indicate that the greater the experience the more the salary received; r = .0 would indicate no relation between the two, while r = — 1. would mean that the less the experience the higher the salary, or the lower the salary, the more the experience.

To find coefficients of correlations by Sheppard's method of unlike signs involves the division of the correlation table (Table L) into quadrants by the medians of the two distributions. Individual cases falling above or in excess of the medians in either distribution are said to be positive (+) for that distribution and those falling below the median in either distribution are said to be negative (—).

Sheppard's formula involves the finding of the percentage which the measures of unlike signs are of the total number of measures. This gives a value "U" which is transferred to a value of "r" from a table.[1] In the distribution tables used in these studies, it was not possible to locate the median within any step and divide the cases falling upon that step in the proper quadrant. Thus, in Table L the Median for the "salary" is $910, and the median for "age" is 31.6 years. Thorndike[1] gives an adaptation of Sheppard's formula to provide for the "zero cases"—those falling within the median steps. (In Table L the "$900 step" for salary and "30 years" step for age). Because of the nature of the material and the number of cases involved a simplification of Thorndike's formula was used. In determining the limits of the quadrants, if the median fell within the first fourth of the step, the line was drawn at the beginning of the step, if it fell within the middle half of the step, the lines were drawn at the beginning and close of the step, and if the median fell within the last fourth of the step the line was drawn at the close of the step. (Heavy lines indicate where quadrant division occur in Table L.) This method insures that the misplacement of measures in counting the number in the quadrants

[1] Thorndike Mental and Social Measurements—page 171. Teacher's College, Columbia University.

can never be more than ¼ of the cases falling within the median step. The value of "U" was then determined by the formula $U = \frac{u + \frac{1}{2}d}{n}$ where "u" is the sum of the cases with unlike signs, "n" the total number of cases and "d" the "zero pairs" falling within the median step. The process for the distribution table shown in Table L will serve as an illustration.

=	+
74	24
−	+
+	+
22	73

d = 19

$$U = \frac{(24 + 22) + \frac{1}{2}(19)}{212} = \frac{}{212}\,55.5 = .26$$

From table, r = .6848

This shows a distinct relation between "age" and "salary received" for the teachers in this group. It is observable from the table that there is a markt tendency for the teachers who are above the median age to be above the median salary also, and for those below the median age to be below the median salary. Where the cases were irregular or buncht heavily upon the median step, the value of "r" was checkt by finding the "coefficient of mean square contingency"[1] which "is built up by reference to the theory of probability, and measures relationship in terms of the difference between the numbers of measures actually found in the various compartments of the correlation table (or 'contingency' table more generally), and the numbers that might be expected there by pure chance." The coefficient of mean square contingency gives a value "C" which may be interpreted in the same way as a value of "r" even tho they are by no means synonomous.

The method of securing "C" is by the formula $C = \sqrt{\frac{X^2}{N + X^2}}$

$103 \times 96 \div 212 = 47$
$103 \times 19 \div 212 = 9$
$103 \times 97 \div 212 = 47$
$109 \times 96 \div 212 = 49$
$109 \times 19 \div 212 = 10$
$109 \times 97 \div 212 = 50$

74 (47)	5 (9)	24 (47)	103
22 (49)	14 (10)	73 (50)	109
96	19	97	212

[1] Pearson's tables for Statisticians and Biometricians—page 35, Cambridge University Press. Yule Theory of Statistics—page 64, C. Griffin Co. Rugg Statistical Method Applied to Education, Hougton Mifflin Co.

$$X^2 = \frac{(74-47)^2}{47} + \frac{(9-5)^2}{9} + \frac{(47-24)^2}{47} + \frac{(49-22)^2}{49} + \frac{(14-10)^2}{10} + \frac{(73-50)^2}{50}$$

$$X^2 = \frac{27^2}{47} + \frac{4^2}{9} + \frac{23^2}{47} + \frac{27^2}{49} + \frac{4^2}{10} + \frac{23^2}{50}$$

$$X^2 = 55.7 \quad C = \sqrt{\frac{55.7}{212+55.7}} = .46$$

This gives a lower coefficient than r = .68 obtained by Sheppard's formula, but it indicates very clearly the presence of a relation between the two items—salary and age, for that group of teachers. Allowance must also be made in interpreting coefficients of mean square contingency, for the fact that in tables of 4 compartments the greatest possible value of "C" i. e. for perfect correlation, would not be greater than C = .71. For 6 compartments the highest possible value must be between C = .71 and C = .82 which is the highest possible value for 9 compartments. Not more than 9 compartments were used in this study. This will greatly decrease the seemingly great difference be-

TABLE LXIX

TABLE SHOWING COMPARISONS FOR CERTAIN SELECTED ITEMS BETWEEN COEFFICIENTS OF CORRELATIONS (Computed by Modification of Sheppard's Method of Unlike Signs)[1] AND COEFFICIENTS OF MEAN SQUARE CONTINGENCY[2] COMPUTED FOR THE SAME ITEMS

Group and study	A	B	C	D	E
IV. Experience and Salary (1)	r = .55 C = .37	r = .67 C = .48	r = .31 C = .23	r = .34 C = .31	r = .39 C = .27
Difference between C and r...	.18	.19	.08	.03	.12
IV. Living Expenses and Salary (2a)	r = .71 C = .47	r = .61 C = .48	r = .68 C = .47	r = .70 C = .47	r = .68 C = .49
Difference between C and r...	.24	.13	.21	.23	.19
IV. % of Salary Spent for Living. (3a) Expenses and Salary.....	r = — .34 C = — .24	r = — .25 C = — .26	r = — .23 C = — .18	r = — .04 C = — .04	r = — .03 C = — .09
Difference between C and r...	.10	.01	.05	.00	.06
IV. Increase or Decrease in % of Salary Spent and salary... (4)	r = — .06 C = — .07	r = — .31 C = — .24	r = .03 C = .06	r = .16 C = .18	r = — .06 C = — .35
Difference between C and r...	.01	.07	.03	.02	.29
IV. Recreation, Professional (5a) Advancement and Salary.	r = .34 C = .23	r = .00 C = .08	r = .09 C = .06	r = .19 C = .12	r = .25 C = .17
Difference between C and r...	.11	.08	.03	.07	.08
IV. Total Expenses and Salary (6a)	r = .78 C = .55	r = .66 C = .53	r = .60 C = .44	r = .76 C = .49	r = .72 C = .53
Difference betwen C and r....	.23	.13	.16	.27	.19
IV. Total Schooling and Salary (9)	r = .06 C = .13	r = — .56 C = — .35	r = .13 C = .13	r = — .22 C = — .24	r = — .17 C = — .13
Difference between C and r...	.07	.21	.00	.02	.04

[1] For explanation of modification see page 165
[2] For method of securing coefficient of mean square contingency see page 165.

tween the r = .68 and the C = .46 found for Table L. Seventy-eight of the correlations were checkt by having coefficients of mean square contingency computed, 35 of them are arranged in Table LXIX for seven typical studies for Group IV for all geographical groups. In only one case of the 78 contingency coefficients was there difference enough between the findings to materially change the correlation which might be said to exist. The case in point was Group IV E, where an r of —.06 becomes a C of —.35. The relationships shown by the coefficients in Tables LV and LVI may, therefore, be taken as indicative of the presence or absence of relationships in varying degrees on a coarse scale.

In getting an index for the different size groups the averages of the coefficients of correlation are made and the probable error[1] of this average computed. The probable error seems large in many cases due to the small number of coefficients averaged.

[1] P. E. computed by formula P. E. $= +.6745 \frac{S.D.}{\sqrt{n}}$ in which n = 5 except in Group V where it is 4

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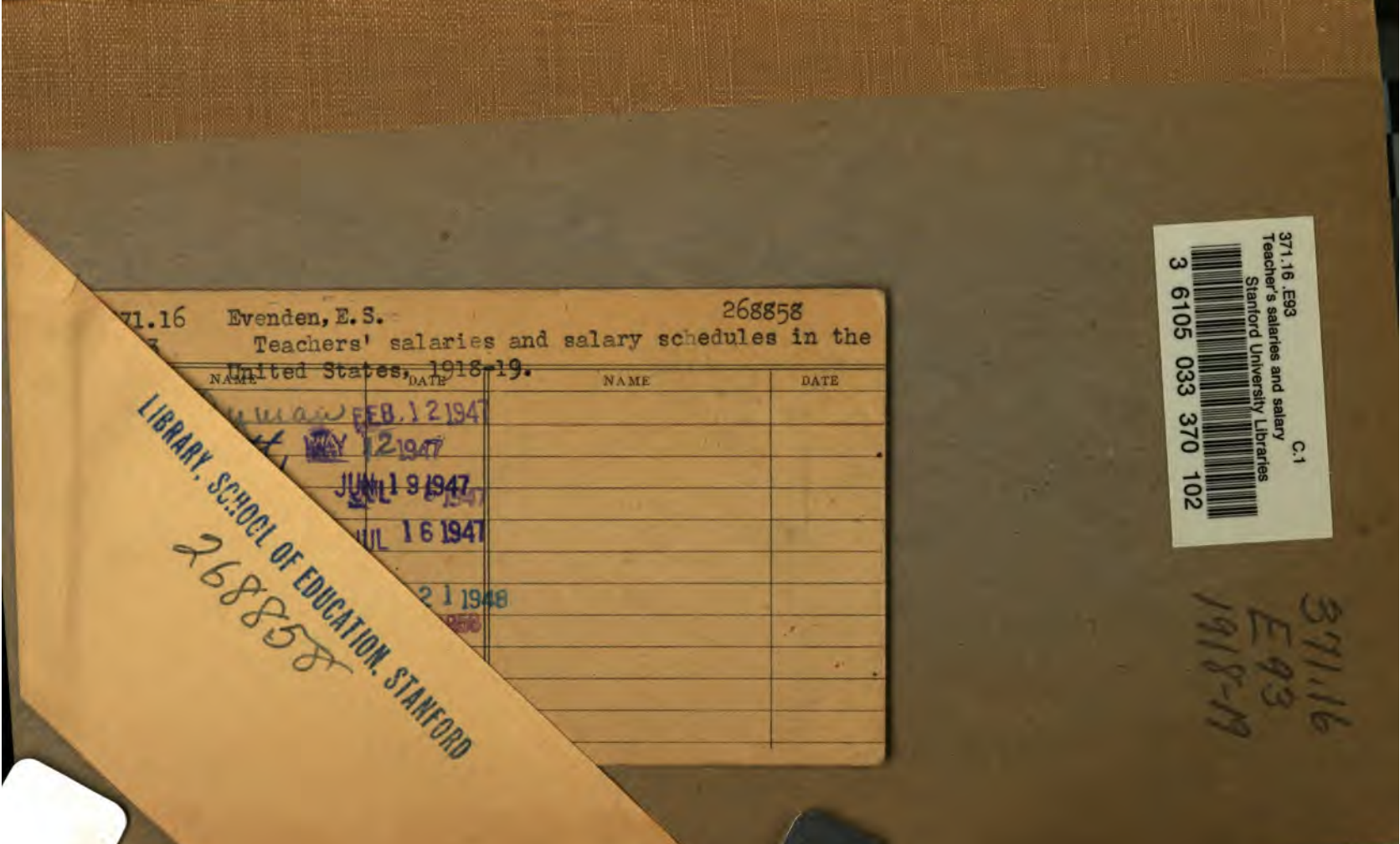
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